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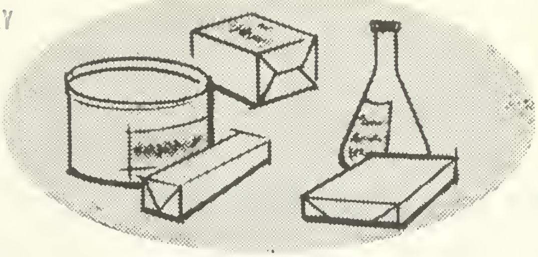
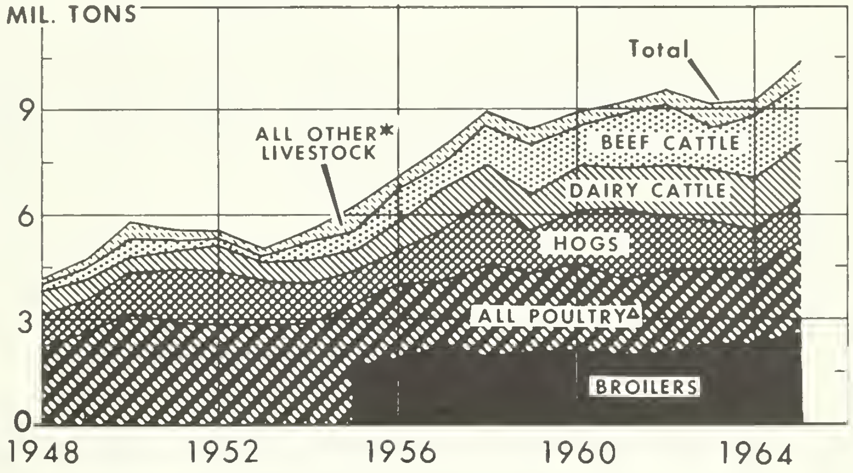


FATS and OILS SITUATION

OS-236 For 3:00 P.M. Release, February 2, 1967

Soybean meal consumed in the United States more than doubled since 1948/49, rising from 4.2 million tons that year to over 10 million in 1965/66. The rapid growth in beef cattle and broiler production, along with increased feeding per animal, were factors boosting soybean meal demand. Quantities consumed by dairy cattle, hogs, and other animals also increased significantly. Currently, about half of the total soybean meal fed is consumed by livestock and the other half by poultry. (See page 21.)

SOYBEAN MEAL CONSUMED BY ANIMAL CLASSES



YEAR BEGINNING OCTOBER. *INCLUDES SHEEP, HORSES AND MULES, AND OTHER LIVESTOCK ON FARMS AND ALL LIVESTOCK NOT ON FARMS. △INCLUDES CHICKENS RAISED, HENS AND PULLETS, AND TURKEYS. °DATA FOR BROILERS NOT AVAILABLE PRIOR TO 1955.

U. S. DEPARTMENT OF AGRICULTURE NEG. ERS 4871-67 (1) ECONOMIC RESEARCH SERVICE

IN THIS ISSUE

Oilseed Meal Production and Use Trends (Page 21.)
Soybean Oil and Meal Yield Factors (Page 29.)

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Table 1.--Wholesale and retail prices per pound for fats and oils

Item	December		1966		
	1964	1965	October	November	December
	Cents	Cents	Cents	Cents	Cents
Wholesale Prices:					
Butter, creamery, Grade A, (92-score) bulk, New York	59.9	65.2	70.7	67.9	67.4
Butter, creamery, Grade A, (92-score) bulk, Chicago	59.2	63.4	68.8	67.6	66.5
Butter, creamery, Grade A, (92-score) prints, San Francisco	72.5	76.8	83.8	81.8	80.8
Castor oil, dehydrated, tanks, New York	25.1	25.0	25.0	25.0	25.0
Castor oil, No. 1, Brazilian, tanks, imported, New York	13.8	14.3	15.4	15.6	15.8
Castor oil, No. 1, tanks, f.o.b., New Jersey mills	15.8	16.1	16.7	16.7	16.7
Coconut oil, crude, tank cars, Pacific Coast, f.o.b. mills 1/	14.7	14.5	12.5	12.5	13.0
Coconut oil, crude, tanks, f.o.b. New York 1/	14.7	14.5	12.7	12.7	13.4
Coconut oil, refined, drums, l.c.l., New York 1/	18.0	20.8	20.0	20.0	20.0
Cod oil, spot, drums, New York	11.5	12.5	9.6	9.6	9.6
Codliver oil, medicinal, U. S. P., barrels, New York	18.2	19.5	19.5	19.5	19.5
Corn oil, crude, tank cars, f.o.b. Midwest mills	14.1	18.1	13.3	14.1	14.3
Corn oil, refined, tanks, New York	16.7	21.3	16.0	17.1	17.4
Cottonseed oil, crude, tank cars, f.o.b., S. E. mills	12.3	12.0	13.2	13.1	12.9
Cottonseed oil, crude, tank cars, f.o.b., Valley	12.1	11.8	13.2	13.1	12.8
Cottonseed oil, crude, tank cars, f.o.b., Texas	12.2	11.7	13.2	13.0	12.8
Cottonseed oil, p.s.y., bleachable, tank cars, New York 2/	13.5	13.5	15.0	15.1	14.6
Cottonseed oil, refined, tanks, New York	14.8	14.5	16.2	16.0	15.7
Degras, Lanolin technical, drums, New York	37.0	40.0	22.0	22.0	22.0
Glycerin, soaplye, tanks, New York 3/	14.0	13.9	14.9	15.2	15.5
Grease, A white, tank cars, delivered Chicago	8.3	7.9	6.7	6.3	6.7
Grease, B white, delivered, Chicago	8.0	7.1	6.1	5.6	5.9
Grease, yellow, delivered, Chicago	7.7	6.8	5.6	5.3	5.6
Grease, white, choice, tanks, New York	8.9	9.3	7.4	7.0	7.2
Grease oil, extra No. 1, drums, Chicago	13.5	13.5	13.5	13.5	13.5
Lard, loose, tank cars, Chicago	11.0	11.8	10.7	10.3	9.3
Lard, prime steam, tierces, Chicago	10.9	11.7	10.7	10.2	9.4
Lard, refined, 1-pound cartons, Chicago 4/	16.5	18.5	16.1	15.8	14.8
Linseed oil, raw, tank cars, Minneapolis	13.9	12.7	12.6	12.8	12.8
Linseed oil, raw, tanks, New York	15.0	13.8	13.6	13.9	13.9
Margarine, colored, delivered, Eastern U. S.	26.0	26.1	27.3	27.3	27.3
Margarine, yellow, quarters, f.o.b., Chicago	26.2	26.6	27.2	27.2	27.2
Margarine, white, domestic vegetable, Chicago	24.2	24.6	24.0	24.0	24.1
Menhaden oil, crude, tanks, f.o.b., Baltimore	9.1	9.5	9.5	9.4	8.8
Menhaden oil, light pressed, tanks, New York	11.3	11.3	11.3	11.3	11.3
Neat's foot oil, 30°, drums, carlots, New York	27.0	27.0	27.0	27.0	27.0
Oiticica oil, drums, f.o.b., New York	19.8	24.8	19.5	19.4	19.0
Oiticica oil, tanks, New York	17.8	22.5	17.5	17.4	16.8
Oleo oil, extra, drums, Chicago	18.2	18.2	19.8	19.8	19.8
Olive oil, imported, edible, drums, New York	33.5	36.7	37.1	38.0	38.0
Palm oil, clarified, drums, f.o.b. New York 5/	14.6	15.2	15.2	15.2	15.2
Palm oil, Congo, tank cars, f.o.b., New York	11.8	13.1	12.8	12.8	12.8
Palm kernel oil, bulk, c.i.f., New York 5/	14.4	13.9	12.6	12.0	12.0
Peanut oil, crude, tank cars, f.o.b. S. E. mills	15.2	13.2	13.2	13.1	13.1
Peanut oil, refined, tanks, New York	17.9	15.7	16.1	15.8	15.6
Rapeseed oil, refined (denatured), tanks, New York	14.8	15.5	15.2	15.2	15.2
Safflower oil, nonbreak, tanks, East Coast	15.6	14.3	16.8	16.8	16.5
Sesame oil, refined, drums, New York	33.0	33.0	37.0	37.0	37.0
Shortening, all vegetable, hydrogenated, 440-lb. drums, New York	24.3	20.0	22.0	21.2	21.2
Shortening, all vegetable, hydrogenated, 3 lb. tins, delivered, Eastern U.S.	25.9	25.8	28.7	27.9	27.6
Soybean oil, crude, tank cars, f.o.b., Decatur	12.0	11.2	10.9	10.8	10.6
Soybean oil, refined, tanks, New York	14.0	13.5	13.1	13.2	12.9
Soybean oil, clarified, tanks, New York	13.8	13.1	12.7	12.6	12.4
Sperm oil, natural, 45°, drums, New York	15.5	14.5	14.5	14.5	14.5
Sperm oil, bleached, winter 45°, drums, New York	16.5	15.5	15.5	15.5	15.5
Tall oil, crude, tanks, works	3.6	3.5	3.1	3.1	3.1
Tall oil, refined, tanks, works	7.5	7.5	7.5	7.5	7.5
Tallow, edible, loose, Chicago	11.4	12.2	10.6	10.6	9.7
Tallow, inedible, packers' prime, c.a.f. delivered, Chicago	8.2	7.4	6.5	5.8	6.1
Tallow, inedible, bleachable fancy, delivered, Chicago	8.8	8.0	6.8	6.4	6.8
Tallow, No. 1, inedible, delivered, Chicago	7.7	6.8	5.8	5.3	5.6
Tallow, special, inedible, tanks, delivered, New York	8.3	7.8	6.4	6.4	6.4
Tung oil, imported, drums, f.o.b., New York	26.4	26.5	21.2	19.8	19.0
Tung oil, tanks, New York	24.4	24.3	19.1	17.8	17.0
Tung oil, domestic, tanks, f.o.b. mills	24.7	24.5	24.0	24.0	24.0
Retail prices 6/					
Butter	76.0	77.0	89.5	86.0	85.7
Margarine	26.5	27.7	29.7	29.4	29.5
Shortening	27.5	29.0	30.9	31.0	30.7
Salad Dressing (Italian)	72.8	75.2	75.8	76.0	76.0
Peanut Butter	59.1	60.0	60.1	59.9	59.7
Cooking and Salad oils	32.4	35.5	40.1	40.4	40.7

1/ 3-cent processing tax suspended beginning October 1957.
2/ Nearby futures.
3/ Beginning January 1965, average of weekly prices, New York Journal of Commerce.
4/ Beginning April 1966, one and two pound prints.
5/ 3-cent processing tax suspended beginning July 1959.
6/ Leading cities.

THE FATS AND OILS SITUATION

Approved by the Outlook and Situation Board, January 27, 1967

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SUMMARY

Prices to soybean farmers have remained fairly steady so far this marketing year, averaging $2.83 per bushel during September-January--about 40 cents above the same months in 1965/66. Total disappearance (crushings and exports) is slightly ahead of the year-earlier rate, and farmers are storing a record quantity of soybeans.

Although soybean prices are expected to continue favorable during the remainder of the marketing year, they probably will average slightly lower than in the last 5 months and sharply below the February-August 1966 level of $3.00 per bushel.

The 1966/67 supply of soybeans is placed at 967 million bushels--10 percent more than the previous year. Soybean crushings are now estimated at around 575 million bushels, compared with 538 million in 1965/66. The crushing rate so far this season did not increase as much as was estimated earlier. This is primarily due to the relatively high price of soybeans compared with product values. The crushing rate this season has been determined primarily by expanding soybean meal requirements so that soybean oil stocks have increased modestly. Soybean crushings are expected to pick up, since supplies of competitive cottonseed oil and meal are sharply reduced. Soybean supplies are ample to meet the anticipated pickup in crushings and exports and still permit carryover stocks next September 1 to build up from last year's relatively low 36 million bushels.

Soybean exports thus far this marketing year have about matched last year's record rate even with prices to U.S. soybean farmers averaging higher this year. Total volume will depend upon world availability of competitive oilbearing materials and soybean price movements during the remainder of the marketing year. It is estimated that around 275 million bushels of soybeans will be shipped abroad for all of 1966/67, compared with 251 million in 1965/66. Requirements in Japan and Europe--the major U.S. soybean markets--have trended upward.

Cottonseed oil supplies during the marketing year starting August 1, 1966, are placed at about 1.5 billion pounds--one-third below 1965/66 and the smallest since 1950/51. Domestic disappearance is estimated at 1.2 billion pounds, compared with 1.7 billion in 1965/66. This would leave around 0.3 billion pounds of cottonseed oil available for export or carryout stocks on July 31, 1967.

Cottonseed oil prices (crude, Valley) declined steadily from a seasonal high of 16.6 cents per pound in August 1966 to 12.0 cents in January 1967, reflecting generally lower oil prices in world markets. Part of the early season price strength was due to the lateness in harvesting and ginning the 1966-cotton crop. The seasonal peak in cottonseed oil production has now passed, and prices probably will stabilize--or possibly strengthen--since supplies are sharply below year-earlier levels.

Lard production in the marketing year that began October 1, 1966, is estimated at 2.0 billion pounds--about 5 percent more than a year earlier. Hog slaughter is up about 15 percent from last year, but lard yield per hog is off--from 27.0 to 25.2 pounds. Domestic use is placed at 1.7 billion pounds--up slightly from 1965/66, as lard usage in margarine and shortening increases along with lower prices. This would leave 0.3 million pounds of this year's estimated output available for export or addition to carryout stocks next September 30.

Lard prices (loose, Chicago) dropped from 10.7 cents per pound in October 1966 to 9.1 in January 1967, reflecting increased production and a general decline in food fats and oils prices. Prices probably hit their seasonal lows in January, and a slight rise is in prospect for the rest of the marketing year.

SOYBEANS

Early Intentions Indicate 3 Million Acre Increase in 1967

A USDA survey in 25 States during late November and early December 1966 asked farmers what acreage they intend to plant to soybeans in 1967. These States accounted for 99 percent of the 1966 soybean acreage planted. The 1967 indicated planted acreage in these States is 40.1 million acres--8 percent more than the 37.1 million in 1966. The 12 North Central States expect a 6 percent increase and the 13 Southern States a 13 percent increase. If the 1967 U.S. soybean harvested acreage increases by 3 million acres and yields per acre average 25.0 bushels (1965 and 1966 crops' average), the 1967 soybean crop would be about 1 billion bushels.

This is the first time the USDA has surveyed farmers for their intended planting of soybeans this early in the season. These intentions are subject to greater departures from actual planting than the Intentions Report regularly issued in mid-March.

Decisions on 1967 soybean acreage probably will be influenced by the trend in soybean prices between now and planting time, and the extent of participation in the 1967 Feed Grain Program. The program signup period runs from February 6 through March 3, 1967.

Farm Prices Higher During 1966 Harvest

The value of the 1966 soybean crop is placed at $2.7 billion--up from $2.2 billion in 1965. Soybeans moved ahead of cotton in 1966 in cash value after being tied for second in 1965.

During the heavy marketing months of September 1966 to January 1967, prices received by farmers for soybeans were relatively steady, averaging $2.83 per bushel. They were about 40 cents above a year earlier and above the $2.50 support rate. Average prices during the remainder of the marketing year probably will be slightly lower than the September 1966-January 1967 level and sharply below the February-August 1966 level of $3.00 per bushel. Crushing and export demand for soybeans is expected to pick up, but not enough to prevent some buildup in carryover stocks from last September's low level of 36 million bushels.

Farmers have stored a record quantity of soybeans this year. Farm stocks of soybeans on January 1, 1967, totaled 347 million bushels--about 37 percent of the 1966 crop. This compared with 284 million bushels and 33 percent on January 1, 1966. Stocks of soybeans in all positions (farms, elevators, warehouses, and processing plants) on January 1, 1967, totaled 725 million bushels, compared with 619 million the same date in 1966.

Record Amount of Crop Placed Under CCC Price Support Loans

Through December, producers placed a record 116 million bushels of 1966-crop soybeans under price support loans, compared with 67 million in the same period a year ago (table 2). Apparently many farmers are using the Government program for interim financing (while awaiting market developments), since commercial interest rates are above those charged for the CCC crop loan. CCC loans are available through June 30, 1967. They will mature on July 31, 1967. Depending on the 1967 soybean prospects and market prices at that time, CCC may take over some 1966-crop soybeans on August 1, 1967.

Loans support soybean prices in two major ways: (1) guaranteeing farmers a cash return for the commodity at the support level; and (2) strengthening market prices of the commodity through withdrawal of supplies from the market. The loan method of support gives the farmers an opportunity either to market his crop or keep it under loan, whichever course is most advantageous. If the market price is above the loan level, plus charges, he may pay off the loan and sell his commodity in the open market. However, if the market price is below the loan level, plus charges, the nonrecourse character of the loan agreement makes it possible for him to deliver his commodity to CCC instead of repaying the loan.

Crushing and Export Expected to Increase

Soybean crushings during September-December 1966 totaled 179 million bushels, compared with 172 million a year earlier (table 4). The crushing rate

Table 2.--Soybeans placed under price support and redeemed, cumulative data, 1958-66 1/

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	CCC takeover	
												Quantity	% of crop
	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Pct.
1958-59													
Loan entries	0.1	23.0	67.0	97.7	124.3	138.9	139.8	140.0	140.2	---	---	85.4	14.7
Redemptions	---	---	---	0.2	.9	3.0	7.0	15.2	29.9	41.0	42.6		
1959-60													
Loan entries	0.2	5.5	22.1	32.9	47.9	51.9	52.4	---	---	---	---	3.9	0.7
Redemptions	---	---	0.1	0.2	1.2	1.9	3.6	8.0	22.9	39.7	41.0		
1960-61													
Loan entries	---	3.6	13.7	21.9	25.3	25.6	---	---	---	---	---	0	---
Redemptions	---	---	---	0.2	5.1	13.6	18.6	22.1	23.7	25.1	25.3		
1961-62													
Loan entries	0.1	16.1	70.5	92.9	118.5	131.3	132.3	132.5	---	---	---	60.2	8.9
Redemptions	---	---	0.1	0.5	2.3	5.7	11.7	20.5	37.6	45.0	47.1		
1962-63													
Loan entries	0.1	9.6	32.2	48.6	58.9	68.9	---	---	---	---	---	1.2	0.2
Redemptions	---	---	0.1	0.5	5.3	10.1	15.9	23.5	32.0	40.2	51.7		
1963-64													
Loan entries	0.1	15.0	36.0	50.3	66.8	72.8	---	---	---	---	---	12.3	1.8
Redemptions	---	---	0.1	0.4	1.8	2.9	5.5	11.3	17.6	23.5	32.9		
1964-65													
Loan entries	0.2	6.1	15.5	18.5	28.3	28.6	---	---	---	---	---	0	---
Redemptions	---	---	0.3	2.0	5.0	8.2	10.5	15.1	18.1	20.8	23.8		
1965-66													
Loan entries	---	14.6	48.2	67.3	85.2	86.1	86.4	86.5	---	---	---	0.1	---
Redemptions	---	---	0.1	2.5	15.4	28.2	41.6	56.0	69.0	77.4	81.3		
1966-67													
Loan entries	0.7	37.5	90.8	116.5									
Redemptions	---	---	0.1	1.7									

1/ Data include farm-stored and warehouse-stored loans and purchase agreements.

SOURCE: ASCS Operating Records.

so far this season has not increased as much as was earlier expected--primarily because of the relatively high price of soybeans in relation to product values. Soybean prices to farmers and soybean meal prices are sharply higher so far this season than last, while soybean oil prices are somewhat lower. This situation has resulted in smaller processing margins as compared with a year ago. The crushing rate this year is being determined largely by expanding soybean meal requirements and has resulted in modest increases in oil stocks. The crushing rate is expected to pick up from year earlier levels as supplies of competitive cottonseed oil and meal are sharply reduced and total requirements for soybean oil and meal increases. For the entire 1966/67 marketing year, crushings are expected to total around 575 million bushels, compared with 538 million a year earlier (table 3).

Oil yield per bushel of soybeans processed during September-December 1966 averaged 10.6 pounds and meal yields 47.6 pounds--each about the same as in 1965. (See special article beginning on page 29 regarding factors affecting yields and the oil and protein content of 1966-crop soybeans.)

Soybeans inspected for export from September 1, 1966, through January 27, 1967, totaled 124 million bushels, compared with 122 million the same period a year ago. High soybean prices during the summer and fall of 1966 have held down exports so far this year. The rate of exports during the remainder of the current marketing year probably will average larger than the February-August 1966 weekly rate of about 4 million bushels. This outlook mainly reflects the reduced availability of substitute oilseeds (peanuts and cottonseed) to European crushers and the slightly lower level of U.S. soybean prices. Accordingly, soybean exports for the entire 1966/67 marketing year may total around 275 million bushels, compared with 251 million a year earlier. Requirements in Japan and Europe--the major U.S. soybean markets--have trended upward in recent years. Spain is becoming an increasingly more important market for U.S. soybeans and movement during September-December 1966 was well above a year earlier.

SOYBEAN OIL

Domestic Use Increases; Prices Drop Sharply

The 1966/67 production of soybean oil is placed at 6.1 billion pounds, compared with 5.8 billion last year. This estimate is based on a soybean crush of 575 million bushels and oil yield of 10.7 pounds per bushel. Domestic use probably will total around 5.1 billion pounds, compared with 4.7 billion in 1965/66. The expected increase in domestic disappearance of soybean oil during 1966/67 reflects: (1) sharply reduced supplies of cottonseed oil; (2) a small increase in production of competitive animal fats; (3) increased margarine production and consumption; (4) generally lower wholesale prices for edible vegetable oils and animal fats; and (5) further increases in population and consumer incomes.

The level of soybean oil exports for the 1966/67 marketing year is still highly uncertain. A determining factor will be the level of activity under P.L. 480 programs, since dollar exports may be down again. Smaller dollar exports this year will reflect the price premium of U.S. soybean oil over Continental

Table 3.--Soybeans: Supply and disposition, acreage and price, marketing year beginning September 1, 1954-66

Item	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966 1/
							Supply and disposition (Million bushels)						
Supply													
Stocks, Sept. 1 2/	8.1	22.6	21.0	31.6	42.8	87.8	51.8	27.1	78.3	46.0	67.3	29.7	35.6
Production	341.1	373.7	449.3	483.4	580.2	532.9	555.1	678.6	669.2	699.2	700.9	845.6	4/931.5
Total supply	349.2	396.3	470.3	515.0	623.0	620.7	606.9	705.7	747.5	745.2	768.2	875.3	967.1
Disposition													
Crushings	241.4	281.9	313.6	350.9	398.8	394.0	406.1	431.4	472.7	436.8	479.0	537.5	575
Exports	57.3	68.6	83.7	88.4	105.0	139.9	134.7	149.4	180.5	187.2	212.2	250.6	275
Seed	23.4	25.8	26.4	29.5	27.4	29.3	32.9	33.5	34.4	36.5	40.5	42.4	[
Feed	1.6	1.6	1.7	1.5	1.9	1.5	1.3	1.4	1.2	1.0	1.3	1.1	[56
Residual	2.9	-2.6	13.3	1.9	2.1	4.2	4.8	11.7	12.7	16.4	5.5	8.0	[
Total disposition	326.6	375.3	438.7	472.2	535.2	568.9	579.8	627.4	701.5	677.9	738.5	839.6	906
Stocks, Aug. 31 2/	22.6	21.0	31.6	42.8	87.8	51.8	27.1	78.3	46.0	67.3	29.7	35.6	
							Acreage and Yield (Million acres)						
Acreage grown along	18.5	19.7	21.7	21.9	25.1	23.3	24.4	27.8	28.4	29.5	31.6	35.2	37.4
Acreage harvested 3/	17.0	18.6	20.6	20.9	24.0	22.6	23.7	27.0	27.6	28.6	30.8	34.4	36.6
Percent harvested (%)	91.9	94.4	94.9	95.4	95.6	97.0	97.1	97.1	97.2	96.9	97.5	97.7	97.9
							(Bushels)						
Yield per acre harv.	20.0	20.1	21.8	23.2	24.2	23.5	23.5	25.1	24.2	24.4	22.8	24.5	25.4
							Price (Dollars)						
Price per bushel													
Support	2.22	2.04	2.15	2.09	2.09	1.85	1.85	2.30	2.25	2.25	2.25	2.25	2.50
Rec. by farmers	2.46	2.22	2.18	2.07	2.00	1.96	2.13	2.28	2.34	2.51	2.62	2.54	
No. 1 yel, Ill. Pts.	2.60	2.51	2.33	2.20	2.12	2.07	2.53	2.41	2.50	2.59	2.81	2.91	
No. 1 yel. Chicago	2.68	2.59	2.43	2.28	2.22	2.17	2.60	2.49	2.59	2.67	2.88	2.98	

1/ Preliminary.
2/ Estimates prior to 1965. For method, see August 1965 FOS-229, table 2, page 6.
3/ For beans.
4/ Indicated December 1.

Table 4.--Soybeans: Supply and disposition, crop years, 1954-66

Item	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.
Total supply	349.2	396.3	470.3	515.0	623.0	620.7	606.9	705.7	747.5	745.2	768.2	875.3	967.1
Disposition													
Seed, feed and residual (entire year)	27.9	24.8	41.4	32.9	31.4	35.0	39.0	46.6	48.3	53.9	47.3	51.6	56
September-December													
Crushings	76.2	93.4	101.4	107.9	126.5	133.0	137.7	136.7	155.9	151.2	167.4	171.6	178.9
Exports	28.2	38.7	39.5	43.7	39.7	57.3	65.6	64.4	75.8	70.1	92.4	107.9	103.0
Supply remaining, January 1	216.9	239.4	288.0	330.5	425.4	395.4	364.6	458.0	467.5	469.9	461.0	544.2	629
January-August													
Crushings	165.2	188.4	212.2	242.9	272.3	261.0	268.4	294.7	316.8	285.5	311.6	365.9	
Exports	29.1	29.9	44.2	44.7	65.3	82.6	69.1	85.0	104.7	117.1	119.8	142.7	
Season totals													
Crushings	241.4	281.9	313.6	350.9	398.8	394.0	406.1	431.4	472.7	436.8	479.0	537.5	
Exports	57.3	68.6	83.7	88.4	105.0	139.9	134.7	149.4	180.5	187.2	212.2	250.6	
Stocks, Aug. 31	22.6	21.0	31.6	42.8	87.8	51.8	27.1	78.3	46.0	67.3	29.7	35.6	

oil, which results in the substitution of other foreign oils. There are indications that the United States may lose a major part of the Iranian market (119 million pounds in 1965/66) to Russian and East European sunflower oil.

Export commitments under Title I, P.L. 480, with India and Pakistan total about 139 million pounds to date. However, in view of the basic needs of India and Pakistan for edible oils, their slowness to initiate and complete their purchases has been disappointing. Barter exports of edible vegetable oils are being well maintained and purchases for foreign donations are well above the previous year's level.

Soybean oil prices (crude, Decatur) have drifted from 10.9 cents per pound in October 1966 to 10.2 cents in January 1967, averaging 10.6 cents for the period, compared with 11.5 cents a year earlier. The decline reflects the plentiful supply of soybean oil made available by a crushing rate determined primarily by meal demand. Other factors include the absence of measurable commercial export business, uncertainty of the application of the new P.L. 480 legislation as it may affect some normal recipients, and competition in the world markets from other vegetable oils and increased butter supplies in Europe. Soybean oil prices during February-September 1967 probably will average below last year's 12.0 cents per pound.

SOYBEAN MEAL

Domestic Use Increases At Higher Prices

The 1966/67 production of soybean meal is placed at 13.6 million tons, compared with 12.9 million last year. This estimate is based on a soybean crush of 575 million bushels (with a meal yield of 47.5 pounds per bushel). Domestic use is forecast at 11.0 million tons, compared with 10.2 million in 1965/66. This would leave 2.6 million tons available for export or increased carryover stocks next September 30, or about the same as last year.

Among the factors affecting the prospective increase in domestic use of soybean meal during 1966/67 are: (1) the sharp reduction in the quantity of cottonseed meal available for feeding; (2) continuation of the expanding demand for livestock products; and (3) an increase in poultry and hog numbers but slightly fewer cattle. (See special article starting on page 21 regarding trends in oilseed meal production and use.)

Soybean meal prices (44 percent protein, bulk, Decatur) during October-January 1966/67 averaged $81 per ton, compared with $74 the same 4 months a year ago. Prices during February-September 1967 are expected to average below the $85 per-ton-level last year, even though domestic and export demand continues strong.

Table 5.--Soybean oil: Supply and disposition and oil equivalent of exports of soybeans, 1947-65

Year beginning October	Supply: Production	Supply: Imports	Supply: Stocks October 1	Supply: Total	Disposition: Exports	Disposition: Domestic disappearance	Soybeans (oil equivalent of exports)	Price per pound (tank cars): Crude Decatur	Price per pound (tank cars): Refined N. Y.
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Cents	Cents
1947	1,534	1/	204	1,738	112	1,532	27	23.7	---
1948	1,807	1/	96	1,903	300	1,488	225	13.1	---
1949	1,937	1/	113	2,050	291	1,646	128	12.3	---
1950	2,454	---	113	2,567	490	1,906	272	17.8	21.5
1951	2,444	1/	171	2,615	271	2,150	167	11.3	14.1
1952	2,536	1/	194	2,730	93	2,462	320	12.1	14.8
1953	2,350	---	174	2,525	71	2,326	436	13.5	16.2
1954	2,711	---	127	2,838	50	2,609	666	11.9	14.8
1955	3,143	---	179	3,322	556	2,539	741	12.5	15.5
1956	3,431	---	227	3,658	807	2,565	937	12.7	15.4
1957	3,800	---	286	4,085	804	3,051	939	10.8	13.7
1958	4,251	---	2/281	4,532	930	3,304	1,209	9.5	11.8
1959	4,338	---	298	4,636	953	3,376	1,552	8.3	10.4
1960	4,420	---	308	4,728	3/721	3,329	1,431	11.3	13.6
1961	4,790	---	677	5,467	3/1,308	3,540	1,685	9.5	11.7
1962	5,091	---	618	5,709	3/1,165	3,624	1,984	8.9	11.1
1963	4,822	---	920	5,742	3/1,106	4,058	2,103	8.5	10.7
1964	5,146	---	578	5,724	3/1,357	4,069	2,265	11.3	13.4
1965 4/	5,800	---	297	6,097	947	4,688	2,764	11.8	13.6
1966 5/	6,150	---	462	6,612		5,100	3,025		

1/ Less than 500,000 pounds. 2/ Adjusted to new census basis which includes hydrogenated oils and stearin. 3/ Includes estimates of foreign donations of fats and oils, not reported by Census, 1960-64. 4/ Preliminary. 5/ Forecast except October 1 stocks.

Totals computed from unrounded numbers.

Table 6.--Soybean oil: Utilization, year beginning October, 1947-65

Year beginning October	Food: Shortening	Food: Margarine	Food: Cooking & salad oils 1/	Food: Other edible	Food: Total	Non-Food: Paint and varnish	Non-Food: Resins and plastics	Non-Food: Other drying oil products	Non-Food: Linoleum and oilcloth	Non-Food: Other inedible 2/	Non-Food: Foots and loss	Non-Food: Total	Total domestic disappearance
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
1947	764	263	233		1,260	99	---	---	21	82	70	272	1,532
1948	694	244	241		1,180	111	---	---	31	89	78	308	1,488
1949	776	265	288		1,329	112	---	---	30	97	78	317	1,646
1950	795	459	344		1,599	91	62	11	7	50	87	308	1,906
1951	800	583	404		1,786	109	68	11	19	60	97	364	2,150
1952	879	735	462		2,077	155	61	9	12	42	106	386	2,462
1953	905	661	437		2,002	138	56	7	7	32	84	324	2,326
1954	979	741	545		2,264	138	71	11	2	15	107	344	2,609
1955	803	725	668		2,196	115	71	9	3	39	107	344	2,539
1956	764	836	627		2,227	117	72	9	1	31	107	337	2,565
1957	993	1,041	692		2,726	103	54	9	---	28	132	325	3,051
1958	1,136	1,082	665	77	2,960	102	66	6	---	37	133	343	3,304
1959	1,183	1,114	680	23	3,000	101	74	4	---	48	147	375	3,376
1960	1,097	1,073	793	26	2,989	96	64	4	1	36	139	340	3,329
1961	1,353	1,036	771	20	3,180	88	74	4	---	43	151	359	3,540
1962	1,222	1,069	933	15	3,239	90	78	6	---	48	163	385	3,624
1963	1,391	1,126	1,146	21	3,684	97	84	6	---	42	146	374	4,058
1964	1,404	1,107	1,105	32	3,648	94	95	4	---	62	165	420	4,069
1965 3/	1,739	1,241	1,203	38	4,221	100	101	6	---	54	206	467	4,688

1/ Adjusted for exports of refined and further processed salad oil. Prior to January 1965 no adjustment made for exports of undeodorized hydrogenated oil. 2/ Includes soap, fatty acids and other miscellaneous 3/ Preliminary.

Totals computed from unrounded numbers.

Table 7.--Food fats and oils: Supply and disposition, 1957-66

Item	Year beginning October									
	1957	1958	1959	1960	1961	1962	1963	1964	1965 1/	Forecast 1966
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
Stocks, October 1										
Butter	145	146	93	136	238	2/419	2/450	2/188	161	68
Lard	69	46	93	92	100	73	81	68	62	64
Cottonseed oil	146	154	190	217	170	296	488	433	236	202
Soybean oil	286	281	298	308	677	618	920	578	297	462
Other 3/	49	56	60	78	94	128	206	118	110	178
Sub-total	694	683	734	830	1,279	1,534	2,145	1,385	866	975
Finished products 4/	140	145	172	190	288	480	355	240	206	235
Total food fats and oils	834	828	906	1,021	1,567	2,014	2,500	1,625	1,072	1,210
Imports 3/	70	74	66	81	91	55	73	50	63	60
Production										
Butter	1,502	1,413	1,435	1,488	1,596	1,491	1,453	1,409	1,125	1,150
Lard	2,423	2,679	2,726	2,484	2,471	2,497	2,480	2,208	1,905	2,000
Cottonseed oil 5/	1,420	1,589	1,832	1,786	1,952	1,930	1,939	2,001	1,833	1,250
Soybean oil	3,800	4,251	4,338	4,420	4,790	5,091	4,822	5,146	5,800	6,150
Other 3/ 5/	678	767	771	863	923	1,057	1,208	1,318	1,467	1,500
Sub-total	9,823	10,700	11,102	11,041	11,731	12,066	11,902	12,082	12,130	12,050
Soybean exports (oil equiv.)	939	1,209	1,552	1,431	1,685	1,983	2,103	2,265	2,764	
Total food fats and oils	10,762	11,909	12,654	12,472	13,416	14,049	14,005	14,348	14,894	
Total supply	11,666	12,811	13,626	13,574	15,074	16,118	16,578	16,023	16,029	
Exports 6/										
Butter	36	19	22	9	7/19	7/131	7/319	150	24	
Lard	461	608	716	513	508	571	706	431	218	
Cottonseed oil 5/	250	406	506	7/371	7/474	7/392	7/586	643	272	
Soybean oil	804	930	953	7/721	7/1,308	7/1,165	7/1,106	1,357	947	
Other 3/ 5/	19	34	43	7/40	11	15	147	216	224	
Adjustment 8/	85	117	88	83	77	93	111	77	64	
Sub-total	1,655	2,114	2,328	1,737	2,397	2,367	2,975	2,874	1,749	
Soybeans (oil equivalent)	939	1,209	1,552	1,431	1,685	1,983	2,103	2,265	2,764	
Total exports	2,593	3,323	3,880	3,168	4,082	4,350	5,078	5,139	4,513	
Domestic use										
Butter	1,467	1,449	1,373	1,379	1,400	1,331	1,398	1,288	1,197	1,100
Lard 9/	1,994	2,024	2,005	1,968	1,985	1,908	1,789	1,788	1,683	1,725
Cottonseed oil	1,195	1,147	1,299	1,461	1,352	1,347	1,407	1,555	1,595	1,200
Soybean oil	3,051	3,304	3,376	3,329	3,540	3,624	4,058	4,069	4,688	5,100
Other 3/	719	796	773	912	968	1,040	1,230	1,162	1,218	1,275
Adjustment 8/	-85	-117	-88	-83	-77	-93	-111	-77	-64	
Total 9/	8,341	8,603	8,739	8,965	9,168	9,157	9,771	9,785	10.317	
Total (calculated net) 10/	8,336	8,576	8,721	8,867	8,976	9,282	9,875	9,812	10,306	
Total use for food 11/	8,145	8,389	8,438	8,560	8,602	8,849	9,607	9,270	9,872	
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
Per capita, civilian and military 12/										
Butter (fat content)	6.8	6.6	6.1	6.1	6.1	5.7	5.9	5.3	4.9	
Other	38.5	39.4	39.3	39.2	38.7	39.8	42.9	41.2	44.2	
Total (fat content)	45.3	46.0	45.4	45.3	44.8	45.5	48.8	46.5	49.1	

1/ Preliminary. 2/ Includes estimates of butter oil, ghee, and canned butter. 3/ Includes beef fats, peanut, corn, olive, safflower and sesame oils. 4/ Shortening, margarine, salad and cooking oils. 5/ Includes oil equivalent of oilseeds exported. 6/ Includes shipments. Butter, cottonseed oil and adjustments includes quantities from CCC stocks that are not reported in Census data. 7/ Includes estimates of foreign donations of fats and oils, not reported by Census. 8/ Includes exports of processed food oils not classified by kind, shortening and other secondary fats. 9/ Adjusted for estimated changes in stocks of farm lard. 10/ Adjusted to reflect changes in stocks of finished products. 11/ Excludes food fats used for non-food purposes, but includes non-food oils (mostly coconut and palm kernel) used in food. 12/ Adjusted for trade and changes in stocks of shortening, margarine and salad and cooking oils.

COTTONSEED

1966 Crop Down 35 Percent; Farm Prices Highest Since 1952

The 1966 cottonseed crop was 3,964,000 tons, compared with 6,116,000 tons in 1965. The sharp decline resulted from heavy grower participation in the 35 percent diversion option of the 1966 Upland Cotton Program. Cottonseed yield per acre in 1966 was 826 pounds, compared with the 1965 record of 898 pounds. The 1966 cottonseed crop will produce about 1,250 million pounds of crude cottonseed oil and 1.8 million tons of cake and meal.

Oil Usage Down Sharply; Price 2¢ Over Soybean Oil

The total supply of cottonseed oil for the marketing year that started August 1, 1966, is estimated at 1,550 million pounds, compared with 2,317 million a year earlier. The decline from last year is mainly due to reduced output, although carryover stocks were also smaller. Domestic use of cottonseed oil is estimated at 1,200 million pounds, compared with 1,668 million in 1965/66. This would leave 350 million pounds available for export during the year and for carryover stocks on August 1, 1967.

Domestic use of cottonseed oil during August-November 1966 totaled 441 million pounds--187 million pounds, or 30 percent, less than the same 4 months in 1965. Usage of cottonseed oil in shortening was down 40 percent; use in salad and cooking oils was down 27 percent; and consumption in margarine was off 22 percent. Salad and cooking oil is the major outlet for cottonseed oil, accounting for about two-thirds of total domestic disappearance. Manufacturers of cooking and salad oils are turning more to blended vegetable oils or are switching to lower priced soybean oil in order to remain competitive.

Cottonseed oil exports during August-December of the current marketing year were 24 million pounds--down sharply from 191 million in the same period a year earlier. The decline results mainly from reduced U.S. availabilities and relatively high prices. Cottonseed oil in Western Europe--the major U.S. dollar market--has not been competitive with foreign oils (such as sunflower, peanut, coconut and rapeseed).

Cottonseed oil prices (crude, Valley) declined steadily from 16.6 cents per pound in August 1966 to 12.0 cents in January 1967, as domestic use and exports were sharply curtailed. However, average price for the 6-month period was 13.8 cents, or about 2.4 cents per pound above prices a year earlier. Part of the early season price strength was due to the lateness in harvesting and ginning the 1966-cotton crop. The seasonal peak in the output of cottonseed oil has now passed, and prices probably will stabilize, or possibly increase, since supplies are sharply below year-earlier levels.

During August-January 1966/67, the price premium of cottonseed oil averaged 2.2 cents per pound higher than soybean oil, compared with 0.2 cents last year. However, the differential narrowed from 2.9 cents in September 1966 to

Table 8.--Cottonseed, cottonseed oil, and meal: Supply and disposition, crop years, 1958-66

Item	Year beginning August								
	1958	1959	1960	1961	1962	1963	1964	1965	1966
					Cottonseed				
COTTONSEED	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
Supply									
Stocks, August 1	175	100	105	188	280	234	168	156	204
Production	4,798	5,991	5,886	5,978	6,139	6,192	6,227	6,116	3,964
Total supply	4,973	6,091	5,991	6,166	6,419	6,426	6,395	6,272	4,168
Disposition									
Seed, feed and residual	430	487	446	340	342	364	306	325	278
August-December									
Crushings	2,303	2,808	2,776	2,610	2,916	2,815	2,679	2,625	1,940
Exports	1	1	1	2	5	1	1	1/	1/
Supply remaining January 1	2,239	2,795	2,768	3,214	3,156	3,246	3,409	3,322	1,950
January-July									
Crushings	2,136	2,683	2,576	2,929	2,917	3,071	3,247	3,109	1,835
Exports	3	7	4	5	5	7	6	9	5
Season totals									
Crushings	4,439	5,491	5,352	5,539	5,833	5,886	5,926	5,734	3,775
Exports	4	8	5	7	10	8	7	9	5
Stocks, July 31	100	105	188	280	234	168	156	204	110
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
Price per ton									
Support 2/	41.00	34.00	34.00	45.00	44.00	44.00	44.00	43.00	48.00
Received by farmers	43.80	38.80	43.60	51.10	47.90	50.70	47.10	46.70	3/65.80
					Cottonseed oil				
COTTONSEED OIL	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
Supply									
Stocks, August 1	168	212	287	250	324	514	624	421	301
Production	1,518	1,861	1,808	1,865	1,942	1,981	1,999	1,896	1,250
Total supply	1,686	2,073	2,095	2,115	2,266	2,495	2,624	2,317	1,551
Disposition									
August-November									
Domestic disappearance	435	372	345	490	522	498	518	628	441
Exports 4/	24	178	117	110	89	101	226	143	20
Stocks, December 1	294	380	390	320	461	637	535	281	310
December-July									
Domestic disappearance	697	891	1,110	831	857	889	984	1,040	759
Exports 4/	318	344	273	360	285	382	475	205	
Season totals									
Domestic disappearance	1,132	1,263	1,455	1,321	1,379	1,387	1,502	1,668	1,200
Exports 4/	342	522	390	470	374	483	701	348	
Total distribution	1,474	1,785	1,845	1,791	1,754	1,883	2,203	2,016	
Stocks, July 31	212	287	250	324	514	624	421	301	
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Price per pound									
Crude, tank cars, Valley	11.5	10.0	11.6	12.4	10.4	9.9	11.5	12.8	
					Cottonseed meal				
COTTONSEED MEAL	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
Supply									
Stocks, August 1 5/	112	116	190	143	134	190	249	168	134
Production	2,061	2,547	2,504	2,506	2,734	2,790	2,770	2,695	1,800
Imports	150	32	43	72	45	33	14	43	75
Total supply	2,323	2,696	2,738	2,721	2,913	3,013	3,032	2,906	2,009
Disposition									
August-December									
Feed 6/	1,165	1,202	1,202	1,273	1,350	1,311	1,301	1,264	974
Exports	4	114	45	6	60	34	69	70	6
Stocks, January 1	78	110	198	82	101	188	127	81	94
January-July									
Feed 6/	1,037	1,157	1,336	1,307	1,275	1,398	1,419	1,399	901
Exports	2	33	12	1	37	21	76	39	
Season totals:									
Feed 6/	2,202	2,359	2,538	2,580	2,625	2,709	2,720	2,663	1,875
Exports	6	147	57	7	97	55	145	109	
Total distribution	2,208	2,506	2,595	2,587	2,722	2,764	2,865	2,772	
Stocks, July 31 5/	116	190	143	134	190	249	168	134	
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
Price per ton									
Bulk, Memphis	60.55	55.65	55.10	59.25	65.60	63.35	59.90	68.80	

1/ Less than 500 tons 2/ Purchase price, basis grade. 3/ Preliminary. 4/ Beginning 1960 includes estimates of foreign donations, not reported by Census. Donations reported by Census since January 1965. 5/ Stocks at Processors' plants. 6/ Includes small quantities of cottonseed meal used for fertilizer on farms of cotton growers, estimated at 30,000 tons annually.

1.8 cents in January 1967. The price spread probably will widen some over the rest of the marketing year, because of declining supplies of cottonseed oil, both current and prospective.

Reflecting the sharp cutback in production, cottonseed meal prices (41% protein, bulk, Memphis) during August-January 1966/67 averaged $82 per ton--up from $64 a year earlier. Domestic disappearance during August-December 1966 totaled 973,900 tons, compared with 1,264,300 in 1965. Cottonseed meal prices will continue at relatively high levels during the remainder of the current marketing year, averaging above the February-July 1966 level of $74 per ton.

LARD

Output Up 9 Percent; Yield Per Hog Down

Commercial hog slaughter, seasonally high during October-December 1966, was 15 percent above the previous year. However, lard yield per hog averaged only 25.2 pounds--down 1.8 pounds from 1965. As a result, lard output in October-December 1966 was up only 9 percent from the 496 million produced in the first quarter of the previous marketing year.

In coming months, hog slaughter is expected to continue above a year ago as the 9 percent larger 1966 fall pig crop moves to market this winter and spring. Based on breeding intentions reported December 1, the 1967 spring pig crop, is expected to be about 3 percent above last year's. These hogs will arrive at market beginning late next summer. For the entire 1966/67 marketing year, lard production (including farm) is estimated at 2.0 billion pounds, compared with 1.9 billion in 1965/66.

Domestic use of lard during 1966/67 is estimated at 1.7 billion pounds, of which about 1.1 billion may be as direct use. For the first 2 months of 1966/67, 25 percent more lard has been used in margarine and shortening manufacture than last year, mainly because of lower prices. In November 1966, USDA started buying lard-shortening for distribution to needy families, schools and institutions. About 42 million pounds have been purchased to date under this program, virtually all of which has been lard. Processing (refining) costs for lard are lower than those for shortening.

Lard exports during October-December 1966 totaled 48 million pounds compared with 46 million for the same period in 1965. Nearly three-fourths of this total went to the United Kingdom, the largest single market for U.S. lard in recent years. Increased U.S. availabilities and lower prices are factors boosting exports. Also, Western European hog slaughter is reportedly down about 5 percent from last winter's level.

Lard prices (loose, Chicago) dropped from 10.7 cents per pound in October 1966 to 9.1 in January 1967. Prices for this period averaged 9.8 cents--2.4 cents below the year before. The decline reflects increased lard production this year and the general price decline in food fats and oils. Prices probably hit their seasonal lows in January, and a slight rise is in prospect for the rest of the marketing year.

Table 9.--Lard: Supply and disposition, 1947-66

Year beginning October	Supply: Production	Supply: Stocks October 1	Supply: Total	Disposition: Exports and shipments: Exports	Disposition: Exports and shipments: Shipments	Disposition: Exports and shipments: Total	Disposition: Domestic disappearance 1/
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
1947	2,283	142	2,425	298	45	343	1,956
1948	2,480	117	2,597	556	48	604	1,912
1949	2,629	66	2,695	520	64	584	2,022
1950	2,812	82	2,894	583	47	630	2,184
1951	2,918	57	2/2,981	688	63	751	2,071
1952	2,509	143	2,653	467	48	515	2,111
1953	2,248	42	2,290	398	58	456	1,773
1954	2,564	50	2,614	528	59	587	1,959
1955	2,852	75	2,927	662	57	719	2,065
1956	2,614	123	2,737	530	60	590	2,039
1957	2,423	69	2,492	394	65	461	1,994
1958	2,679	46	2,725	536	73	608	2,024
1959	2,726	93	2,819	655	62	716	2,005
1960	2,484	92	2,576	446	66	513	1,968
1961	2,471	100	2,571	446	62	508	1,985
1962	2,497	73	2,570	508	63	571	1,908
1963	2,480	81	2,561	637	69	706	1,789
1964	2,208	68	2,276	366	65	431	1,788
1965 3/	1,905	62	1,967	156	62	218	1,683
1966 4/	2,000	64	2,064	210	65	275	1,725

1/ Adjusted for estimated changes in stocks on farm. 2/ Includes 6 million pounds imported. 3/ Preliminary. 4/ Forecast except stocks October 1.

Totals computed from unrounded numbers.

Table 10.--Lard: Utilization, year beginning October, 1947-65

Year beginning October	Food uses: Shortening	Food uses: Margarine	Food uses: Direct use	Food uses: Total	Non-food uses: Soap	Non-food uses: Other industrial	Non-food uses: Total	Total domestic disappearance
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
1947	115	4	1,831	1,950	5	2	6	1,956
1948	122	4	1,767	1,893	1/	18	18	1,912
1949	159	4	1,825	1,989	---	33	33	2,022
1950	201	5	1,892	2,097	58	29	87	2,184
1951	214	4	1,829	2,048	---	23	23	2,071
1952	249	7	1,847	2,103	---	8	8	2,111
1953	139	6	1,626	1,772	1/	1	1	1,773
1954	291	11	1,650	1,952	2	5	7	1,959
1955	403	27	1,631	2,061	1	2	4	2,065
1956	425	27	1,584	2,036	1	2	3	2,039
1957	345	19	1,630	1,993	1/	1	1	1,994
1958	425	26	1,564	2,015	---	10	10	2,024
1959	511	60	1,423	1,994	---	11	11	2,005
1960	497	58	1,398	1,953	---	15	15	1,968
1961	562	80	1,327	1,969	---	16	16	1,985
1962	588	76	1,228	1,892	---	15	15	1,908
1963	470	68	1,234	1,772	---	18	18	1,789
1964	473	94	1,208	1,775	---	13	13	1,788
1965 2/	477	67	1,122	1,666	---	17	17	1,683

1/ Less than 500,000 pounds. 2/ Preliminary.

Totals computed from unrounded numbers.

PEANUTS

Record Supply This Year

The total supply of peanuts (farmers' stock basis) in the marketing year which began August 1, 1966, is now placed at 2.8 billion pounds (net weight). This is 3 percent above last year and the largest supply on record. The 1966 peanut crop--at 2.4 billion pounds--is around 40 percent above domestic requirements for food and farm use. The surplus is expected to be acquired by CCC under the price support program. The season average price received by farmers for 1966-crop peanuts is estimated at 11.3 cents per pound--equal to the 1966 support price.

Producer loans and purchases on 1966-crop farmers' stock peanuts were available through January 1967. Farm storage loans will mature on May 31, 1967, or earlier on demand by CCC. Loans to peanut grower associations mature on demand. Through December 31, 1966, about 531 million pounds of farmers' stock peanuts, or 22 percent of the 1966 crop, were placed under loans. Another 117 million pounds of shelled peanuts (farmers' stock equivalent) were purchased under the shelled purchase program, bringing total loan and purchases to around 648 million pounds (farmers' stock basis).

USDA Production Estimates Now on Net Weight Basis

In December 1966, the USDA's Crop Reporting Board changed the peanut production estimates from a gross-weight to a net-weight basis, 1959 to date. Gross-weight estimates included foreign material and an undetermined moisture content. Under the new method, estimates for production and yield per acre exclude all foreign material and moisture in excess of 8 percent in the Virginia-Carolina area and 7 percent in the Southeast and Southwest. As a result, the revised peanut production estimates average about 5 percent less than formerly during 1959-66 period. The only category on the disappearance side affected by this change thus far is the residual item (farm loss and shrinkage). Table 12 shows the revised statistics for supply and disposition.

FLAXSEED

1966/67 Supplies Down 15 Percent; Farm Prices Are Up Slightly

Flaxseed supplies in the marketing year that began July 1, 1966, are now placed at 39 million bushels. They are 15 percent below the 46 million of last season. Crushings are estimated at 23 million bushels--approximately the same as a year ago. Exports, with the assistance of the export subsidy program, may total around 6 million bushels (nearly 5 million were shipped before the Great Lakes were closed for the winter). Last season, flaxseed exports totaled 5.3 million bushels. Another 2 million bushels likely will be used to plant the 1967 crop, leaving about 8 million bushels for carryover next July 1, about half in commercial hands. Farm prices have declined from $2.93 per bushel last August to $2.87 in January 1967.

Table 11.--Peanuts: Production and prices received by farmers, by areas, 1950-66

Crop year	Production				Price received by farmers, per pound			
	Va.-N. C. area	S. E. area	S. W. area	Total	Va.-N. C. area	S. E. area	S. W. area	National average
	Million pounds	Million pounds	Million pounds	Million pounds	Cent	Cent	Cent	Cent
1950	483	1,068	466	2,035	12.7	10.4	10.3	10.9
1951	563	853	243	1,659	12.2	9.6	9.2	10.4
1952	549	662	145	1,356	11.3	10.4	11.4	10.9
1953	490	782	301	1,574	12.0	10.6	11.0	11.1
1954	424	429	155	1,008	13.5	11.1	11.7	12.2
1955	388	812	376	1,548	13.1	11.2	11.5	11.7
1956	599	860	147	1,607	11.9	10.7	11.2	11.2
1957	527	660	249	1,436	10.7	10.1	10.4	10.4
1958	554	888	373	1,814	10.9	10.5	10.5	10.6
1959	1/466	1/737	1/321	1/1,523	10.6	9.0	9.4	9.6
1960	500	851	367	1,718	11.0	9.4	10.0	10.0
1961	471	838	348	1,657	11.6	10.7	10.7	10.9
1962	559	798	363	1,719	11.8	10.6	10.7	11.0
1963	542	1,034	365	1,942	11.3	11.2	11.1	11.2
1964	525	1,137	437	2,099	11.8	11.0	10.9	11.2
1965	659	1,238	486	2,384	12.0	11.2	11.1	11.4
1966 2/	653	1,137	639	2,428	11.4	11.2	11.2	11.3

1/ Beginning with 1959 crop, production reported on a net weight basis. Prior years were gross weight.
2/ Preliminary. Based on December 1 indications.

Table 12.--Peanuts: Supply and disposition (farmers' stock basis), United States, 1950-66

Year beginning Aug. 1	Supply				Disposition			Domestic food use		
	Production	Imports	Beginning stocks 1/	Total supply	Exports and shipments	Crushed for oil	Seed, feed, farm loss and shrinkage	Military	Civilian	Civilian per capita
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Pounds
1950	2,035	0	203	2,238	69	629	212	14	967	6.4
1951	1,659	0	347	2,006	8	432	139	10	1,005	6.6
1952	1,356	0	412	1,768	3	195	142	10	998	6.4
1953	1,574	2/	420	1,994	239	303	152	10	1,007	6.4
1954	1,008	180	283	1,471	9	107	132	7	1,012	6.3
1955	1,548	5	204	1,757	6	257	172	1	954	5.8
1956	1,607	5	367	1,979	102	260	161	3	1,026	6.1
1957	1,436	2	427	1,865	48	239	157	3	1,081	6.4
1958	3/1,814	2	337	2,153	62	335	164	8	1,088	6.3
1959	1,523	1	496	2,020	72	292	107	3	1,151	6.5
1960	1,718	2/	395	2,113	81	362	86	8	1,236	6.9
1961	1,657	3	340	2,000	34	256	87	7	1,258	6.9
1962	1,719	2	358	2,079	43	302	75	8	1,285	6.9
1963	1,942	2	366	2,310	97	380	106	5	1,342	7.1
1964	2,099	2	380	2,481	179	473	71	8	1,403	7.4
1965	2,384	1	341	2,726	250	517	71	16	1,485	7.7
1966 4/	5/2,428	1	383	2,812	200	575	100	25	1,515	7.8

1/ Includes oil stock peanuts. 2/ Less than 500,000 pounds. 3/ Beginning with 1959 crop, production reported on a net weight basis. Prior years were gross weight. 4/ Preliminary. Disposition is forecast. 5/ Indicated December 1.

Shelled edible peanuts and shelled oil stock peanuts converted to farmers stock peanuts based on conversion factors calculated from result of shelling operations in each year.

Through December 31, 1966, only 1.6 million bushels of flaxseed were under price supports, compared with 8.5 million a year ago. Loans are available up to 30 days before maturity. Loans will mature on April 30, 1967, in all States except in the major production area of Minnesota, Wisconsin, and North Dakota and South Dakota, where the date of maturity is May 31, 1967.

Domestic disappearance of linseed oil during July-November 1966, remained unchanged from a year ago--140 million pounds. For the entire 1966/67 marketing year, domestic disappearance is expected to total around 350 million pounds, compared with 336 million in 1965/66. Linseed oil exports, also assisted by the export subsidy program, totaled 82 million pounds during July-December 1966, compared with 40 million pounds last year. CCC is expected to continue holding on a commingled basis the 80 million pounds of linseed oil acquired through a toll crush program for 1963-crop flaxseed. Linseed oil prices (raw, Minneapolis) during July-January 1966/67, averaging 12.7 cents per pound, were only fractionally below the year-earlier period. For the entire 1966/67 marketing year, linseed oil prices are expected to average near the 12.9 cents per pound of 1965/66.

Linseed meal prices (bulk, Minneapolis) in late January were $73 per ton, $2 above a year ago.

INEDIBLE TALLOW

Prices Down Sharply From Year Ago

With reduced cattle slaughter about offset by an increased hog slaughter, inedible tallow and grease production during 1966/67 is placed at 4.4 billion pounds--approximately the same as last season's.

During October-January 1966/67, inedible tallow prices (prime, c.a.f. delivered, Chicago) averaged 6.1 cents per pound, compared with 7.4 cents for the year-earlier period. For the entire 1966/67 marketing year, inedible tallow prices are expected to average around a cent below the 7.3 cents of 1965/66.

Tallow exports in October-December 1966, totaled 521 million pounds--up 2 percent from this period last year. Reduced tallow prices are expected to encourage an increase in exports, thus reversing the trend of the past 2 years, when exports declined due to high U.S. prices and increased competition from foreign oils, primarily fish oil. Inedible tallow exports reached a peak in 1963/64, when 2.3 billion pounds were exported. About 11 percent of this total was under P.L. 480 programs and the rest for dollar sales. Currently, exports are moving mainly for dollars. However, shipments under government programs are expected to expand this year.

During 1966/67, domestic disappearance is expected to total around 2.4 billion pounds, or about the same rate as last year. Approximately half of the total annual production of inedible tallow and greases is utilized domestically in soaps, animal feeds, and fatty acids (table 14).

Table 13.--Tallow, inedible, and greases: Supply and disposition, 1935-39 average and 1947-66

Year beginning October	Supply				Disposition		Price per pound Chicago	
	Apparent production 1/	Imports	Stocks Oct. 1	Total	Exports	Domestic disappearance	Prime	No. 1
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Cents	Cents
Average								
1935-39	888	51	315	1,254	86	949	6.2	5.6
1947	1,980	1	259	2,240	74	1,842	18.5	17.3
1948	2,101	1	325	2,427	373	1,699	8.2	6.9
1949	2,150	2	356	2,508	497	1,733	6.8	5.9
1950	2,343	4	279	2,626	509	1,777	13.5	11.9
1951	2,268	1	340	2,609	720	1,550	6.3	5.1
1952	2,616	1	340	2,957	1,070	1,523	4.3	3.6
1953	2,661	3	363	3,027	1,186	1,574	6.2	5.6
1954	2,875	4	268	3,147	1,265	1,620	7.0	6.5
1955	3,215	2	260	3,477	1,494	1,677	6.9	6.3
1956	3,147	3	306	3,456	1,431	1,786	7.1	6.6
1957	2,896	2/	239	3,135	1,107	1,799	7.6	7.0
1958	3,214	2	230	3,444	1,311	1,808	6.6	6.0
1959	3,540	2/	327	3,867	1,718	1,806	5.2	4.5
1960	3,561	2/	343	3,904	1,769	1,745	6.0	5.3
1961	3,776	2	389	4,167	1,710	2,093	5.1	4.6
1962	3,829	2	365	4,196	1,738	2,124	5.0	4.5
1963	4,604	2	334	4,940	2,338	2,320	5.9	5.4
1964	4,442	2	282	4,726	2,155	2,220	7.8	7.3
1965 3/	4,397	1	351	4,749	1,962	2,371	7.3	6.8
1966 4/	4,400	1	417	4,818	2,000	2,400		

1/ Apparent production computed from factory consumption, net foreign trade, and change in stocks. Reported factory consumption excludes that from small rendering plants. 2/ Less than 500,000 pounds. 3/ Preliminary. 4/ Forecast.

Table 14.--Tallow, inedible, and greases: Utilization, 1935-39 average and 1947-65

Year beginning October	Non-food products						
	Soap	Animal feeds	Fatty acids	Lubricants and similar oils	Other	Loss	Total
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
Average							
1935-39	787	---	---	---	161	1	949
1947	1,510	---	184	23	125	---	1,842
1948	1,381	---	173	25	119	2	1,699
1949	1,335	---	202	21	176	---	1,733
1950	1,280	---	250	28	217	1	1,777
1951	1,103	---	199	24	224	---	1,550
1952	1,008	---	237	24	252	1	1,523
1953	967	71	245	25	258	8	1,574
1954	861	174	267	38	268	12	1,620
1955	840	263	290	38	229	17	1,677
1956	788	383	284	34	285	13	1,786
1957	744	542	249	29	232	3	1,799
1958	732	476	353	66	182	---	1,808
1959	735	439	391	80	162	---	1,806
1960	732	443	351	70	151	---	1,745
1961	702	732	402	79	177	---	2,093
1962	688	774	433	78	151	---	2,124
1963	660	861	478	91	230	---	2,320
1964	688	714	530	100	187	---	2,220
1965 1/	649	855	574	102	191	---	2,371

1/ Preliminary.

Totals computed from unrounded numbers.

TUNG OIL

1966/67 Output to Triple; Most Will Go Under CCC Loan

The 1966 tung nut crop is placed at 93,300 tons (air dried nuts in the husk)--nearly 3 times the 1965 output and about one-fourth above average. Production was up in all States except Florida. Mississippi alone accounted for around three-fifths of the entire crop. Tung oil production in 1966/67 is expected to total around 30 million pounds, compared with 10 million in 1965/66. Most of this production is expected to go under CCC loan. The 1966 CCC support rate is 24.0 cents per pound at southern mills.

Beginning stocks of tung oil on November 1, 1966, totaled 53 million pounds, compared with 51 million last November. About 90 percent--47 million pounds--were either under loan or owned by CCC.

During November-December 1966, about 5.6 million pounds of tung oil were imported, compared with 3.7 million for this period in 1965. The total volume of imports for the 1966/67 season will be determined by market prices, both in the United States and Europe. According to latest reports, tung oil production during the August 1, 1966-July 31, 1967 year in South America (Argentina, Brazil and Paraguay) is estimated at about 76 million pounds, compared with 25 million in 1965/66.

Based on the above estimates for U.S. and South American production and U.S. carryover stocks, total available tung oil supplies in 1966/67 are record large. Chinese production of tung oil is believed to be increasing and while it cannot be brought into the U.S., it is competing with South American oil for the European and Japanese markets. Domestic disappearance in 1966/67 possibly will total around 40 million pounds--up slightly from the 36 million in 1965/66. The pickup in usage is expected as a result of the larger supplies and lower prices.

In October 1966, CCC began offering its inventory of about 14.7 million pounds of 1963-crop tung oil on a competitive bid basis for unrestricted use. Weekly offers of about 500,000 pounds are being made from CCC storage at Marrero, Louisiana. The oil is marketed by USDA in cooperation with the National Tung Oil Marketing Cooperative, Inc., Poplarville, Mississippi. Through late January, around 1.0 million pounds had been sold at an average price of around 16 cents per pound. These sales are setting the market price for tung oil in the United States. In recent months, prices have declined close to 13 cents per pound.

In January, CCC also sold 88,740 pounds of tung oil foots at an average price of 4.1 cents per pound. Additional sales are expected. ("Foots" is a trade term for mixtures of oil and residue that settle in storage tank bottoms).

OILSEED MEALS: POSTWAR TRENDS IN PRODUCTION AND USE

by
Stanley A. Gazelle

Since World War II, the United States has emerged as a leading supplier and user of oilseed meals. Soybean meal now accounts for over four-fifths of the 5 major oilseed meals produced in the United States, and its share is expected to become even larger in the future. Cottonseed meal accounts for about 10 to 15 percent, and the balance is composed of linseed meal, copra meal, peanut meal, and --in recent years--safflower meal.

Today, U.S. oilseed meals are playing an increasingly important role in both domestic and world livestock feeding. Present propsects point to even further growth in demand for oilseed meals as a source of high-protein feeds.

Oilseed Meals Are Source of Protein for Animals

Oilseed meals are classified as high-protein, byproduct feeds or concentrates. They are produced simultaneously with oil whenever the oilseeds are processed.

The chief use of oilseed meals is in livestock and poultry feed rations to provide protein in an appropriate nutritional balance with carbohydrates. All animals need protein for growth and maintenance of body tissues. Dairy cattle require additional protein for optimum milk production, and laying hens need extra protein for maximum egg production.

Oilseed meals are fed in 2 ways--either in a complete or balanced formula feed, or as a high-protein supplement to be fed with other low-protein feeds.

Table 15 compares the average composition of selected characteristics for the 4 leading oilseed meals produced from domestically-grown crops.

Table 15.--Average composition (by selected characteristics) of various oilseed meals

Oilseed meal (solvent process)	Total dry matter	Total protein	Digestible protein	Total digestible nutrients	Fiber	Calcium	Phosphorus
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Soybean meal	89.3	45.8	42.1	77.2	5.9	0.32	0.67
Cottonseed meal	91.4	41.6	34.5	66.1	10.7	0.15	1.10
Linseed meal	90.9	35.1	30.7	71.0	9.3	0.40	0.83
Peanut meal	91.5	47.4	43.1	74.3	14.9	0.20	0.65

Adapted from data contained in Farmers' Bulletin No. 2196, Finishing Beef Cattle, U.S. Department of Agriculture, Washington, D.C., March 1964.

Soybean Meal Leading High-Protein Feed

The production and use of oilseed meals have doubled in the postwar period. Total supplies for the October 1966-September 1967 marketing year are placed at 16.4 million tons, compared with 7.9 million tons in 1948/49.

The greatest development during this period was the rapid increase in the production and use of soybean meal. In 1948/49, soybean meal accounted for about 55 percent of total U.S. oilseed meal production. In 1966/67, soybean meal production is expected to triple that of the earlier period and account for around 85 percent of total oilmeal output.

In 1948/49, cottonseed meal accounted for about one-third of total oilseed meal production. During 1966/67, it is expected to account for only about 11 percent, due to sharply reduced output.

The "other" oilseed meals (primarily linseed, peanut, and copra), have trended downward from their levels of the late 1940's, due mainly to decreased production of linseed meal and reduced imports of copra, the source of copra meal.

Total disappearance of oilseed meals increased from 7.7 million tons in 1948/49 to a record 16.2 million in 1965/66. For 1966/67, it is estimated that around 16.2 million tons will be utilized--over four-fifths consumed domestically in animal feeds and the balance exported.

The postwar era witnessed the rise of the United States as an important exporter of oilseed meals. Today, soybean meal exports (excluding meal equivalent of soybean exports) account for over 90 percent of the total oilseed meal shipped abroad (table 16). In 1948/49, they accounted for about 45 percent. Soybean meal exports increased from about 150 thousand tons in 1948/49 to 2.6 million tons in 1965/66. During 1966/67, they likely will be close to the level of last year. Western Europe is the major market, currently taking about three-fourths of total U.S. meal exports. The rapid growth of the livestock and poultry industries in Europe, plus the excellent quality of U.S. soybean meal, have resulted in the increased demand for this high-protein feed. This foreign market has grown despite an increase in soybean meal prices (table 17). However, most U.S. meal exports are in the form of soybeans. About 275 million bushels of soybeans--the equivalent of around 6.5 million tons of meal--probably will be exported during the current marketing year.

United States imports of oilseed meals are relatively small. In recent years, they have averaged less than 100 thousand tons. About another 100 thousand tons of copra meal is imported in the form of copra.

Oilseed meal stocks are necessarily small, as the quality quickly deteriorates if stored for any length of time. Stocks at the beginning of the marketing year generally average around 2 percent of annual production.

Table 16.--Oilseed cakes and meals: Supply and disposition, year beginning October, 1961-66

Item	Supply				Disposition		
	Stocks, October 1 1/	Production	Imports	Total	Exports	Domestic disappearance	Total
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
1961-62							
Soybean	78	10,342	---	10,420	1,064	9,262	10,326
Cottonseed	73	2,629	76	2,778	26	2,652	2,678
Other 2/	25	517	18	560	28	524	552
Total	176	13,488	94	13,758	1,118	12,438	13,556
1962-63							
Soybean	94	11,127	0	11,221	1,476	9,586	11,062
Cottonseed	100	2,718	42	2,860	85	2,615	2,700
Other 2/	9	541	10	560	64	3/487	551
Total	203	14,385	52	14,640	1,624	12,689	14,313
1963-64							
Soybean	159	10,609	0	10,768	1,478	9,168	10,647
Cottonseed	160	2,730	30	2,920	54	2,727	2,781
Other 2/	9	572	21	602	66	514	580
Total	327	13,910	52	14,290	1,598	12,410	14,008
1964-65							
Soybean	122	11,286	---	11,408	2,036	9,266	11,302
Cottonseed	139	2,768	20	2,927	139	2,710	2,849
Other 2/	21	571	15	607	95	3/496	591
Total	282	14,625	35	14,942	2,270	12,472	14,742
1965-66 4/							
Soybean	106	12,901	---	13,007	2,601	10,274	12,875
Cottonseed	78	2,604	44	2,726	99	2,564	2,663
Other 2/	16	612	8	636	155	3/468	623
Total	199	16,116	52	16,369	2,855	13,306	16,161
1966-67 5/							
Soybean	132	13,650	---	13,782		11,000	
Cottonseed	64	1,800	75	1,939		1,855	
Other 2/	13	635	10	658		560	
Total	209	16,085	85	16,379		13,415	

1/ Stocks at processing plants. 2/ Includes linseed, peanut, copra, and other oilseed meals. 3/ Domestic disappearance is smaller than amounts shown as fed to all animal classes in tables 18 and 20 due to unadjusted data for imports and exports. 4/ Preliminary. 5/ Partly estimated.

Totals computed from unrounded numbers.

Table 17.--Oilseed meal prices: Average wholesale price per ton, 1948-66

Year beginning October	Soybean meal, 44 percent protein, bulk, Decatur 1/	Cottonseed meal, 41 percent protein, bulk, Memphis	Linseed meal, 34 percent protein, bulk, Minneapolis 2/	Copra meal, 20 percent protein, bulk, Los Angeles	Peanut meal, 50 percent protein, bulk, S.E. points 3/	Soybean meal as percentage of:			
						Cottonseed meal	Linseed meal	Copra meal	Peanut meal
	Dollars	Dollars	Dollars	Dollars	Dollars	Percent	Percent	Percent	Percent
1948	66.10	58.80	62.90	64.35	61.50	112	105	103	107
1949	64.30	60.25	64.75	61.05	64.20	107	99	105	100
1950	64.45	70.35	57.60	61.65	62.60	92	112	105	103
Average, 1948-50	64.95	63.13	61.75	62.35	62.77	103	105	104	103
1951	83.35	81.95	70.40	87.05	85.05	102	118	96	98
1952	67.55	66.65	67.95	79.55	71.45	101	99	85	95
1953	78.65	63.35	65.45	64.40	75.55	124	120	122	104
1954	60.70	60.75	60.75	67.80	70.30	100	100	90	86
1955	52.55	51.35	54.35	65.60	52.75	102	97	80	100
Average, 1951-55	68.56	64.81	63.78	72.88	71.02	106	107	94	97
1956	47.45	51.70	51.60	63.65	47.20	92	92	75	101
1957	53.40	56.50	50.30	58.65	56.40	95	106	91	95
1958	55.80	59.45	66.40	79.75	56.60	94	84	70	99
1959	55.55	56.25	60.10	73.45	56.90	99	92	76	98
1960	60.60	56.15	54.15	64.00	56.80	108	112	95	107
Average, 1956-60	54.56	56.01	56.51	67.90	54.78	97	97	80	100
1961	63.60	59.20	66.00	73.80	61.80	107	96	86	103
1962	71.30	66.90	67.30	80.80	67.40	107	106	88	106
1963	71.00	62.20	58.00	76.70	62.70	114	122	93	113
1964	70.20	59.80	61.90	77.10	67.70	117	113	91	104
1965	81.50	72.40	74.50	84.80	79.50	113	109	96	103
Average, 1961-65	71.52	64.10	65.54	78.64	67.82	112	109	91	105
1966									
October	82.20	75.10	81.70	82.00	88.10	109	101	100	93
November	78.90	80.90	78.20	82.00	91.40	98	101	96	86
December	84.60	83.20	77.70	82.00	93.40	102	109	103	91

1/ October 1948-June 1950, quoted at 41% protein. 2/ May 1947-June 1950, quoted at 34% protein; July 1950-July 1954, quoted at 36% protein; August 1954 to date, quoted at 34% protein. 3/ October 1948-September 1964, quoted at 45% protein.

Growth in Beef Cattle and Broiler Industries Expand Oilseed Meal Demand

During the period 1948-50, total oilseed meals consumed domestically by all classes of animals averaged 7.9 million tons--60 percent of which was soybean meal, 27 percent cottonseed meal, and the balance other oilmeals (table 18). Almost two-thirds of this total was consumed by all classes of livestock and around one-third by all classes of poultry. In 1965/66, total oilseed meal consumed reached a record 13.3 million tons--77 percent of which was soybean meal, 19 percent cottonseed meal, and the balance other oilmeals. About three-fifths of this total was fed to livestock and two-fifths to poultry.

Of significance is the tremendous increase in the quantities fed to broilers and beef cattle. Since the late 1940's, the quantity of oilseed meals fed to broilers increased around 4 times and doubled for beef cattle. The increased quantities consumed by these two classes are the result of postwar growth in animal numbers and the increase in the feeding rate per animal.

The greatest increase occurred in the use of soybean meal. Soybean meal as a percentage of total oilseed meals fed to dairy cattle increased from 30 percent for the 1948/49-1949/50 average to 70 percent in 1965/66; for beef cattle, 12 to 58 percent; and for hogs, 66 to 76 percent. Use of soybean meal in poultry feeds has averaged over 90 percent of total oilseed meals so used throughout the postwar period. Of the total quantity of soybean meal fed to all animals in 1965/66, about one-half was fed to cattle, hogs, and other livestock and the other half to all poultry, compared to 43 and 57 percent, respectively, for the earlier period. (Tables 19 and 20 show these relationships for the various oilseed meals for all classes of livestock and poultry.)

Improved Feeding Methods Increased the Use of Oilseed Meals

The number of high-protein-consuming animal units 1/ increased from 131 million in 1948/49 to record 149 million in 1965/66--up 14 percent. Feeding per high-protein-consuming animal unit rose from 106 pounds in the earlier period to a high of 169 pounds in 1965/66--nearly a three-fifths increase. The increase partly reflects the significant strides made in scientific feeding methods, plus the ever-growing supply of oilseed meals which became available during the postwar period.

Oilseed Meal Prices Exhibit Wide Variations

Oilseed meal prices generally follow similar patterns but fluctuate widely from year to year. Currently, prices at principal markets are near the high peaks of 1951, when they averaged around the $80 per ton level. In the mid-1950's, when they were at their postwar lows, they averaged around $50-55 per ton.

1/ A high-protein-consuming animal unit is the equivalent of one milk cow in terms of feed consumed. In computing, horses and mules and all livestock not on farms are excluded. A detailed description and method of computation are contained in Statistical Bulletin No. 301, Animal Units of Livestock Fed Annually, 1909 to 1960, December 1961.

Table 18.--Oilseed cakes and meals: Quantities consumed by different animal classes and type of meal, year beginning October, 1948-50 average and 1951-66 annual

Type of meal and year	Livestock						Poultry				Total oilseed meals fed
	Cattle			Hogs	Other livestock 1/	Total livestock	Broilers	Hens and pullets	Other poultry 2/	Total poultry	
	Dairy	Beef	Total								
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
Total oilseed cakes and meals 3/											
Average 1948-50	1,363	1,455	2,818	1,764	455	5,037	678	1,097	1,135	2,910	7,947
1951	1,470	1,940	3,410	1,830	669	5,909	930	1,160	1,130	3,220	9,129
1952	1,685	1,825	3,510	1,741	470	5,721	1,025	1,080	1,090	3,195	8,916
1953	1,600	1,880	3,480	1,671	465	5,616	1,050	930	1,080	3,060	8,676
1954	1,450	1,920	3,370	1,601	465	5,436	1,035	1,065	985	3,085	8,521
1955	1,509	2,076	3,585	1,338	599	5,522	1,558	1,227	872	3,657	9,179
1956	1,557	2,023	3,580	1,545	595	5,720	1,811	1,550	943	4,304	10,024
1957	1,745	2,038	3,783	1,707	648	6,138	2,223	1,430	975	4,628	10,766
1958	1,800	2,305	4,105	2,181	658	6,944	2,000	1,913	917	4,830	11,774
1959	1,771	2,500	4,271	1,530	678	6,479	2,167	1,873	758	4,798	11,277
1960	2,057	2,454	4,511	1,916	574	7,001	2,228	1,640	1,081	4,949	11,950
1961	1,983	2,963	4,946	2,187	582	7,715	2,138	1,557	966	4,661	12,376
1962 4/	2,178	3,021	5,199	2,048	643	7,890	2,229	1,559	961	4,749	12,639
1963 4/	2,216	2,765	4,981	1,693	726	7,400	2,427	1,558	948	4,933	12,333
1964 4/	2,201	2,999	5,200	1,646	721	7,567	2,409	1,570	874	4,853	12,420
1965 4/	2,203	2,911	5,114	1,709	932	7,755	2,687	1,539	1,296	5,522	13,277
1966 5/											13,385
Soybean meal											
Average 1948-50	434	308	742	1,144	256	2,142	---	---	---	2,656	4,798
1951	530	335	865	1,475	330	2,670	---	---	---	2,970	5,640
1952	726	195	921	1,434	215	2,570	---	---	---	2,940	5,510
1953	434	240	674	1,291	190	2,155	---	---	---	2,810	4,965
1954	552	600	1,152	1,201	240	2,593	---	---	---	2,835	5,428
1955	568	710	1,278	925	443	2,646	1,558	966	872	3,396	6,042
1956	784	860	1,644	950	460	3,054	1,811	1,285	943	4,039	7,093
1957	1,025	841	1,866	1,220	513	3,599	2,123	1,265	975	4,363	7,962
1958	1,100	957	2,057	1,871	500	4,428	1,850	1,743	917	4,510	8,938
1959	972	1,346	2,318	1,242	506	4,066	1,982	1,644	758	4,384	8,450
1960	1,268	977	2,245	1,684	399	4,328	2,028	1,400	1,081	4,509	8,837
1961	1,210	1,453	2,663	1,968	405	5,036	1,938	1,292	966	4,196	9,232
1962 4/	1,407	1,708	3,115	1,732	449	5,296	2,004	1,295	961	4,260	9,556
1963 4/	1,477	1,413	2,890	1,267	518	4,675	2,227	1,288	948	4,463	9,138
1964 4/	1,479	1,654	3,133	1,202	514	4,849	2,209	1,304	874	4,387	9,236
1965 4/	1,538	1,675	3,213	1,304	670	5,187	2,531	1,399	1,127	5,057	10,244
1966 5/											11,000
Cottonseed meal											
Average, 1948-50	663	1,039	1,702	174	190	2,066	---	33	---	103	2,169
1951	550	1,540	2,090	140	320	2,550	---	100	---	100	2,650
1952	729	1,465	2,194	142	235	2,571	---	100	---	100	2,671
1953	901	1,520	2,421	150	255	2,826	---	100	---	100	2,926
1954	780	1,170	1,950	150	205	2,305	---	100	---	100	2,405
1955	757	1,190	1,947	310	156	2,413	---	98	---	98	2,511
1956	552	963	1,515	470	135	2,120	---	100	---	100	2,220
1957	470	937	1,407	305	135	1,847	100	150	---	250	2,097
1958	550	990	1,540	200	158	1,898	150	150	---	300	2,198
1959	600	990	1,590	177	163	1,930	185	215	---	400	2,330
1960	590	1,185	1,775	132	166	2,073	200	225	---	425	2,498
1961	590	1,215	1,805	197	170	2,172	200	250	---	450	2,622
1962 4/	657	1,069	1,726	198	186	2,110	225	250	---	475	2,585
1963 4/	642	1,050	1,692	346	198	2,236	200	260	---	460	2,696
1964 4/	616	1,042	1,658	369	197	2,224	200	256	---	456	2,680
1965 4/	565	998	1,563	335	254	2,152	156	125	100	381	2,533
1966 5/											1,825
Other oilseed cake and meals 6/											
Average 1948-50	266	108	374	447	9	830	---	50	---	151	981
1951	390	65	455	215	19	689	---	150	---	150	839
1952	230	165	395	165	20	580	---	155	---	155	735
1953	265	120	385	230	20	635	---	150	---	150	785
1954	118	150	268	250	20	538	---	150	---	150	688
1955	184	176	360	103	---	463	---	163	---	163	626
1956	221	200	421	125	---	546	---	165	---	165	711
1957	250	260	510	182	---	692	---	15	---	15	707
1958	150	358	508	110	---	618	---	20	---	20	638
1959	199	164	363	111	9	483	---	14	---	14	497
1960	199	292	491	100	9	600	---	15	---	15	615
1961	183	295	478	22	7	507	---	15	---	15	522
1962 4/	114	244	358	118	8	484	---	14	---	14	498
1963 4/	97	302	399	80	10	489	---	10	---	10	499
1964 4/	106	303	409	75	10	494	---	10	---	10	504
1965 4/	100	238	338	70	8	416	---	15	69	84	500
1966 5/											560

1/ Includes sheep, horses and mules, and other livestock on farms and all livestock not on farms. 2/ Includes chickens raised and turkeys. 3/ Includes soybean, cottonseed, linseed, peanut, and copra meals. 4/ Subject to revision. 5/ Estimated. 6/ Includes linseed, peanut, and copra meals.

Table 19.--Oilseed cakes and meals: Percentage consumed by different animal classes and type of meal, year beginning October, 1948-49, 1950-54, 1955-59, 1960-64 averages, and 1965 annual

Type of meal and year	Livestock						Poultry				Total oilseed meals fed
	Cattle			Hogs	Other livestock 1/	Total livestock	Broilers	Hens and pullets	Other poultry 2/	Total poultry	
	Dairy	Beef	Total								
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Total oilseed cakes and meals 3/											
1948-49	19.9	17.8	37.7	21.1	5.5	64.3	7.7	13.8	14.3	35.7	100.0
1950-54	16.6	21.0	37.6	20.4	5.9	63.9	11.2	12.4	12.6	36.1	100.0
1955-59	15.8	20.6	36.4	15.7	6.0	58.1	18.4	15.1	8.4	41.9	100.0
1960-64 4/	17.2	23.0	40.2	15.4	5.3	60.9	18.5	12.8	7.8	39.1	100.0
1965 4/	16.6	21.9	38.5	12.9	7.0	58.4	20.2	11.6	9.8	41.6	100.0
Soybean meal											
1948-49	10.4	3.8	14.2	24.5	4.7	43.4	5/	5/	5/	56.6	100.0
1950-54	9.7	7.2	16.9	24.6	4.9	46.4	5/	5/	5/	53.6	100.0
1955-59	11.6	12.2	23.8	16.1	6.3	46.2	24.3	17.9	11.6	53.8	100.0
1960-64 4/	14.9	15.6	30.5	17.1	5.0	52.6	22.6	14.3	10.5	47.4	100.0
1965 4/	15.0	16.4	31.4	12.7	6.5	50.6	24.7	13.7	11.0	49.4	100.0
Cottonseed meal											
1948-49	32.6	46.9	79.5	7.0	9.0	95.5	5/	5/	5/	4.5	100.0
1950-54	27.4	53.0	80.4	6.2	9.4	96.0	5/	4.0	5/	4.0	100.0
1955-59	25.8	44.6	70.4	12.9	6.6	89.9	6/3.8	6.3	5/	10.1	100.0
1960-64 4/	23.7	42.5	66.2	9.5	7.0	82.7	7.8	9.5	5/	17.3	100.0
1965 4/	22.3	39.4	61.7	13.2	10.0	85.0	6.2	4.9	3.9	15.0	100.0
Other oilseed meals 7/											
1948-49	32.4	10.5	42.9	40.3	0.4	83.6	5/	5/	5/	16.4	100.0
1950-54	29.1	15.2	44.3	35.0	2.4	81.7	5/	18.3	5/	18.3	100.0
1955-59	31.6	36.4	68.0	19.8	0.3	88.1	5/	11.9	5/	11.9	100.0
1960-64 4/	26.5	54.4	80.9	15.0	1.7	97.6	5/	2.4	5/	2.4	100.0
1965 4/	20.0	47.6	67.6	14.0	1.6	83.2	5/	3.0	13.8	16.8	100.0

1/ Includes sheep, horses and mules, and other livestock on farms and all livestock not on farms. 2/ Includes chickens raised and turkeys. 3/ Includes soybean, cottonseed, linseed, peanut, and copra meals. 4/ Subject to revision. 5/ Not shown separately. 6/ No shown separately prior to 1957. 7/ Includes linseed, peanut, and copra meals.

Table 20.--Oilseed cakes and meals: Quantities consumed by type of meal and different animal classes, year beginning October, 1948-49, 1950-54, 1955-59, 1960-64 averages, and 1965 annual

Animal class and year	Soybean meal		Cottonseed meal		Other oilseed meals 1/		Total oilseed meal	
	1,000 tons	Percent	1,000 tons	Percent	1,000 tons	Percent	1,000 tons	Percent
Total livestock and poultry 2/								
1948-49	4,338	57.2	2,326	30.6	928	12.2	7,592	100.0
1950-54	5,452	62.1	2,501	28.5	827	9.4	8,780	100.0
1955-59	7,697	72.6	2,271	21.4	636	6.0	10,604	100.0
1960-64 3/	9,200	74.5	2,616	21.2	528	4.3	12,344	100.0
1965 3/	10,244	77.2	2,533	19.0	500	3.8	13,277	100.0
Total livestock 4/								
1948-49	1,881	38.6	2,221	45.5	776	15.9	4,878	100.0
1950-54	2,530	45.1	2,401	42.8	676	12.1	5,607	100.0
1955-59	3,559	57.8	2,042	33.1	560	9.1	6,161	100.0
1960-64 3/	4,837	64.4	2,163	28.8	515	6.8	7,515	100.0
1965 3/	5,187	66.9	2,152	27.7	416	5.4	7,755	100.0
Dairy cattle								
1948-49	451	29.8	760	50.3	300	19.9	1,511	100.0
1950-54	529	36.4	686	47.1	240	16.5	1,455	100.0
1955-59	889	53.0	586	35.0	201	12.0	1,676	100.0
1960-64 3/	1,368	64.3	619	29.1	140	6.6	2,127	100.0
1965 3/	1,538	69.8	565	25.7	100	4.5	2,203	100.0
Beef cattle								
1948-49	165	12.2	1,090	80.6	97	7.2	1,352	100.0
1950-54	393	21.3	1,326	71.9	126	6.8	1,845	100.0
1955-59	943	43.1	1,013	46.3	232	10.6	2,188	100.0
1960-64 3/	1,441	50.7	1,112	39.2	287	10.1	2,840	100.0
1965 3/	1,675	57.5	998	34.3	238	8.2	2,911	100.0
Hogs								
1948-49	1,062	66.4	164	10.2	374	23.4	1,600	100.0
1950-54	1,342	75.1	155	8.7	290	16.2	1,787	100.0
1955-59	1,242	74.8	292	17.6	126	7.6	1,660	100.0
1960-64 3/	1,571	82.7	248	13.1	79	4.2	1,898	100.0
1965 3/	1,304	76.3	335	19.6	70	4.1	1,709	100.0
Total poultry 5/								
1948-49	2,457	90.6	104	3.8	152	5.6	2,713	100.0
1950-54	2,922	92.0	100	3.2	151	4.8	3,173	100.0
1955-59	4,138	93.1	230	5.2	75	1.7	4,443	100.0
1960-64 3/	4,363	90.3	453	9.4	13	0.3	4,829	100.0
1965 3/	5,057	91.6	381	6.9	84	1.5	5,522	100.0
Broilers								
1948-49	6/	---	7/	---	8/	---	582	100.0
1950-54	6/	---	7/	---	8/	---	982	100.0
1955-59	1,865	95.5	7/87	4.5	8/	---	1,952	100.0
1960-64 3/	2,081	91.0	205	9.0	8/	---	2,286	100.0
1965 3/	2,531	94.2	156	5.8	8/	---	2,687	100.0

1/ Includes linseed, peanut, and copra meals. 2/ Includes cattle, hogs, sheep, horses and mules, and other livestock on farms, all livestock not on farms, broilers, hens and pullets, chickens raised and turkeys. 3/ Subject to revision. 4/ Includes cattle, hogs, sheep, horses and mules, and other livestock on farms and all livestock not on farms. 5/ Includes broilers, hens and pullets, chickens raised and turkeys. 6/ Not shown separately prior to 1955. 7/ Not shown separately prior to 1957. 8/ Not shown separately.

Soybean meal prices (44 percent protein, bulk, Decatur) have ranged from a high of $83 per ton in 1951/52 to a low of $47 in 1956/57. Soybean meal prices increased faster in recent years than have cottonseed meal, linseed meal, and peanut meal (table 17). For the 1966/67 marketing year, oilseed meal prices are expected to average around the $75-80 per ton level, reflecting the strong demand for these commodities.

OUTLOOK FOR OILSEED MEALS

The outlook for U.S. oilseed meals continues bright. Since future expansion depends almost entirely upon soybean meal, the rest of this article concerns itself with this commodity and competitive products.

The use of soybean meal is expected to grow as the world demand for meat and dairy products continues to expand. If the rate of growth continues, by 1980 the quantity needed for domestic feeding probably will be double the 9 million tons of the early 1960's. United States soybean meal exports also are expected to increase. However, the rate of increase will depend largely upon the growth of the world's livestock and poultry industries and the supply of competitive products. Also, many countries will continue to import the major portion of their soybean meal requirements in the form of soybeans. A potential market also exists for use of isolated soybean protein and flour for human consumption, especially in the protein-deficient areas of the world.

Principal Competition Comes From Urea

However, competition does exist from other sources. Chief among these is urea, an organic nitrogenous compound. Urea furnishes no energy, vitamins, or minerals in the diet but must be used with carbohydrates such as corn or cereal grains. Feeding of urea is limited to animals with ruminant digestive tracts--such as sheep, beef, and dairy cattle. It is converted into protein by microorganisms within the rumen.

As a feed, urea's principal advantage is that it provides a low-cost source of protein, making it competitive with the oilseed meals. For example, 1 pound of urea plus 6 or 7 pounds of corn can replace 7 or 8 pounds of soybean meal or cottonseed meal. (Feed urea with a 45 percent nitrogen content is potentially equivalent to 2.81 pounds of crude protein per pound.) During 1965/66, the comparative cost of a grain-urea mixture averaged about $30 per ton less than for soybean meal (44 percent protein, Chicago), and around $18 below a ton of cottonseed meal (41 percent protein, Forth Worth).

In 1965/66, it was estimated that urea displaced the equivalent of over 2 million tons of soybean meal. Use of urea likely will expand in the future, but the rate is unknown. Lack of adequate data is a handicap.[2] A detailed analysis of the use of urea in animal feeds is scheduled for release by the Economic Research Service in April 1967.

2/ Additional information on the economic implications of urea in animal feeds is contained in the Feed Situation, FdS-205, August 1964, Economic Research Service, USDA.

Other Competition Limited

Fish meal also competes with oilseed meals. In 1965/66, U.S. fish meal production totaled 243,000 tons. Another 370,000 tons were imported. In 1948/49, production and imports were 241,000 and 47,000 tons respectively.

High-lysine corn, a potential feed grain of the future, could also affect the use of soybean meal. The protein content of this new variety is around 15 percent--nearly double that of the corn produced today. Although further research is necessary before high-lysine corn becomes an important livestock feed, its development may be as significant an advance as was hybrid corn in the 1930's. Its use in animal feeds could reduce substantially the requirements for soybean meal.

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The next issue of the Fats and Oils Situation is scheduled for release on April 4, 1967. Other issues this year are scheduled for release on June 30, September 28, and November 9 (Outlook issue).

FACTORS AFFECTING SOYBEAN OIL AND MEAL YIELDS

by

George W. Kromer

The sharp rise in U.S. soybean production in recent years has been attended by a rapid increase in the volume of soybeans processed by domestic mills. Crushings rose from 218 million bushels in the 1953/54 marketing year to an estimated 575 million for 1966/67. The balance of the soybean crop is exported or used for planting seed.

Variations in soybean oil and meal yields tend to cause changes in prices and total returns from marketing soybeans and soybean products. Changes in soybean oil supply tend to affect prices of food fats and oils. Changes in the supply of soybean meal impinge mainly on the feed-livestock economy.

This paper is concerned mainly with (1) a discussion of factors causing variations in the total value of products per bushel of soybeans processed; and (2) the oil and protein content of 1966-crop soybeans.

Oil Content Affects Value of Soybeans, But Less So Than Earlier Years

The oil and meal content of soybeans influence the value of products obtained from soybeans. Soybeans vary in oil and protein content not only from one large region to another, but from State to State, and even from farm to farm. In general, soybeans having a high percentage of protein, will have a low percentage of oil, and vice versa.

The amount of meal obtained from processing a bushel of soybeans far exceeds the amount of oil. During 1961-65, meal yield averaged 4.4 times that of oil (47.5 pounds of meal to 10.8 pounds of oil). But during this period, a pound of oil usually sold for about 3 times the price of meal (10.0 cents for oil vs. 3.5 cents for meal). The value of the meal (yield times price) during 1961-65 represented 61 percent of the total product value obtained from a bushel of soybeans, whereas soybean oil accounted for 39 percent of the value (table 21). During the 1950's, the oil and meal product value were more equally distributed. In most other oilseed crops, the meal usually represents a smaller percentage of total value than does the oil.

The U.S. average yield of soybean oil per bushel processed (as computed from Census data) trended upward from 9.5 pounds in 1947 to 11.0 pounds in 1953 and has since remained at about this level. This trend resulted partly from improvements in processing techniques (shift to solvent-extraction) and partly from the development and cultivation of soybeans that contain greater quantities of oil. During 1961-65, the yield of oil ranged between 10.7 and 10.9 pounds. Given efficient extraction processes, the yield of crude oil is determined primarily by the oil content of the soybean seed. The oil content of commercial varieties usually ranges between 18 to 22 percent on a moisture-free basis.

Table 21.--Soybean oil and meal: Yield, price per pound, and value per bushel of soybeans processed, 1947-65

Year beginning September	Yield 1/			Price 2/			Value			Percentage distribution of value	
	Meal	Oil	Meal/Oil	Oil	Meal	Oil/Meal	Oil	Meal	Total	Oil	Meal
	Pounds	Pounds	Ratio	Cents	Cents	Ratio	Dollars	Dollars	Dollars	Percent	Percent
1947	47.5	9.5	5.0	23.4	4.15	5.6	2.22	1.97	4.19	53	47
1948	47.2	9.8	4.8	14.0	3.29	4.3	1.37	1.55	2.92	47	53
1949	46.9	9.9	4.7	12.0	3.28	3.7	1.19	1.54	2.73	44	56
1950	46.8	9.7	4.8	17.9	3.16	5.7	1.74	1.48	3.22	54	46
Average	47.1	9.7	4.8	16.8	3.47	4.8	1.63	1.63	3.26	50	50
1951	46.7	10.0	4.7	11.6	4.07	2.8	1.16	1.90	3.06	38	62
1952	47.3	10.8	4.4	12.0	3.52	3.4	1.30	1.66	2.96	44	56
1953	47.4	11.0	4.3	13.4	3.90	3.4	1.47	1.85	3.32	44	56
1954	45.9	10.9	4.2	12.2	3.06	4.0	1.33	1.40	2.73	49	51
1955	46.2	11.1	4.2	12.5	2.68	4.7	1.39	1.24	2.63	53	47
Average	46.7	10.8	4.3	12.3	3.45	3.6	1.33	1.61	2.94	45	55
1956	47.5	10.9	4.4	12.7	2.36	5.4	1.38	1.12	2.50	55	45
1957	46.8	10.8	4.3	11.0	2.64	4.2	1.19	1.24	2.43	49	51
1958	47.3	10.6	4.5	9.6	2.82	3.4	1.02	1.33	2.35	43	57
1959	46.5	11.0	4.2	8.3	2.77	3.0	.91	1.29	2.20	41	59
1960	47.0	11.0	4.3	11.2	3.00	3.7	1.23	1.41	2.64	47	53
Average	47.0	10.9	4.3	10.6	2.72	3.9	1.15	1.28	2.43	47	53
1961	47.2	10.9	4.3	9.7	3.11	3.1	1.06	1.47	2.53	42	58
1962	46.9	10.7	4.4	8.8	3.57	2.5	.94	1.67	2.61	36	64
1963	48.0	10.9	4.4	8.4	3.58	2.3	.92	1.72	2.64	35	65
1964	47.7	10.9	4.4	11.2	3.48	3.2	1.22	1.66	2.88	42	58
1965	47.5	10.7	4.4	11.8	4.02	2.9	1.26	1.91	3.17	40	60
Average	47.5	10.8	4.4	10.0	3.55	2.8	1.08	1.69	2.77	39	61
1947-65 Average	47.1	10.6	4.4	12.2	3.29	3.7	1.28	1.55	2.83	45	55

1/ Industry averages computed from Census data.

2/ Simple average price per pound using the following quotations: Soybean oil, crude, tank cars, f.o.b., Decatur, Ill.; soybean meal, bulk, Decatur, Ill., quoted as 41 percent protein prior to July 1950, 44 percent beginning July 1950.

Most soybeans in the United States are traded on the basis of official grades. Grades are determined by test weight per bushel, and by percentages of moisture, splits, damaged kernels, and foreign materials. Oil and meal content of soybeans are not factors in the grading system for U.S. soybeans.

The U.S. average yield of soybean meal per bushel of soybeans processed has moved up from about 47 pounds during 1956-60 to 47.5 pounds in 1961-65, possibly reflecting the lower moisture content of soybeans in recent years. During 1961-65, meal yields ranged from 47 to 48 pounds per bushel of soybeans crushed (table 21). In commercial varieties of soybeans, the protein content usually ranges between 40 and 45 percent on a moisture-free basis. The actual yield of meal, like that of oil, is affected by the proportion of foreign material in a bushel of soybeans, as well as the moisture content. These factors are related to the amount of loss that occurs in crushing soybeans, which varies from season to season and from mill to mill.

Oil Content of 1966-Crop Soybeans Tends to be Higher in the South

The USDA published in the December 1966 Crop Production report the results of 1,242 soybean samples that were chemically analyzed for oil and protein content, on a dry-weight basis, by crop-reporting districts. Oil content for the 1966 soybean crop in 15 States averaged 20.4 percent and the protein content was 42.2 percent (table 22). These States accounted for 94 percent of the 1966 production in the United States.

This is the first year that the Statistical Reporting Service reported oil and protein content of soybeans taken from sample fields used in objective yield surveys. Therefore, benchmark data are not available. However, in December 1965, the State of Illinois published oil and protein content data for 1965-crop soybeans in that State. A comparison of 1965 and 1966 data indicates no significant difference in oil and protein content of the 1965 and 1966 Illinois soybean crops:

Illinois Soybeans--Oil and Protein Content

Crop	Composition-dry-weight basis	
	Oil	Protein
	Percent	Percent
1965 1/	21.1	42.8
1966 2/	21.1	42.6

1/ Illinois Special Soybean Bulletin, Illinois Cooperative Crop Reporting Service, December 20, 1965.
2/ December 1966 Crop Production, USDA, SRS.

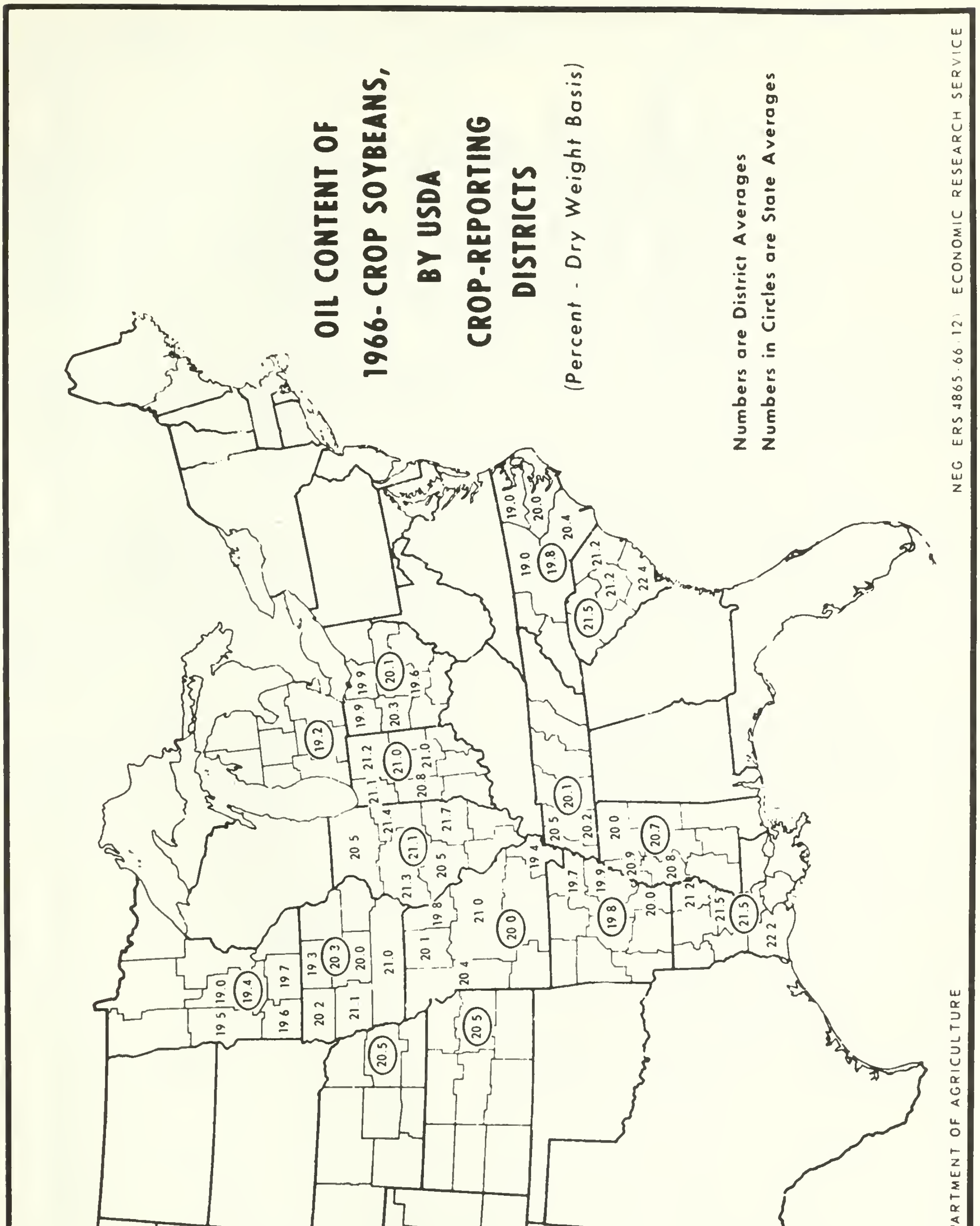
Table 22.--1966 Crop Soybeans: Oil and protein content for selected states, percent dry weight basis 1/

Area and State	Number of samples	Oil content	Protein content	Area and State	Number of samples	Oil content	Protein content
	Number	Percent	Percent		Number	Percent	Percent
Corn Belt States:				Delta States:			
Illinois	118	21.1	42.6	Arkansas	116	19.8	41.7
Iowa	108	20.3	41.9	Mississippi	105	20.7	41.7
Indiana	118	21.0	43.7	Louisiana	53	21.5	41.5
Ohio	127	20.1	44.1	Tennessee	67	20.1	40.2
Missouri	118	20.0	41.2	Total	341	20.3	41.5
Total	589	20.6	42.5				
				Atlantic States:			
Lake States:				North Carolina	78	19.8	43.0
Minnesota	101	19.4	42.5	South Carolina	59	21.5	40.8
Michigan	24	19.2	43.4	Total	137	20.7	41.8
Total	125	19.4	42.6				
Plains States:							
Kansas	28	20.5	41.4				
Nebraska	22	20.5	39.2				
Total	50	20.5	40.0	Total--15 States	1,242	20.4	42.2

1/ Reported in December 1, 1966, Crop Production, SRS.

Table 23.--1966 Crop Soybeans: Oil and protein content, arrayed by selected states, percent dry weight basis

Arrayed by oil content			Arrayed by protein content		
State	Oil content	Protein content	State	Protein content	Oil content
	Percent	Percent		Percent	Percent
Louisiana	21.5	41.5	Ohio	44.1	20.1
South Carolina	21.5	40.8	Indiana	43.7	21.0
Illinois	21.1	42.6	Michigan	43.4	19.2
Indiana	21.0	43.7	North Carolina	43.0	19.8
Mississippi	20.7	41.7	Illinois	42.6	21.1
Kansas	20.5	41.4	Minnesota	42.5	19.4
Nebraska	20.5	39.2	Iowa	41.9	20.3
Iowa	20.3	41.9	Arkansas	41.7	19.8
Ohio	20.1	44.1	Mississippi	41.7	20.7
Tennessee	20.1	40.2	Louisiana	41.5	21.5
Missouri	20.0	41.2	Kansas	41.4	20.5
Arkansas	19.8	41.7	Missouri	41.2	20.0
North Carolina	19.8	43.0	South Carolina	40.8	21.5
Minnesota	19.4	42.5	Tennessee	40.2	20.1
Michigan	19.2	43.4	Nebraska	39.2	20.5
Range	2.3		Range	4.9	


OIL CONTENT OF 1966-CROP SOYBEANS, BY USDA CROP-REPORTING DISTRICTS

(Percent - Dry Weight Basis)

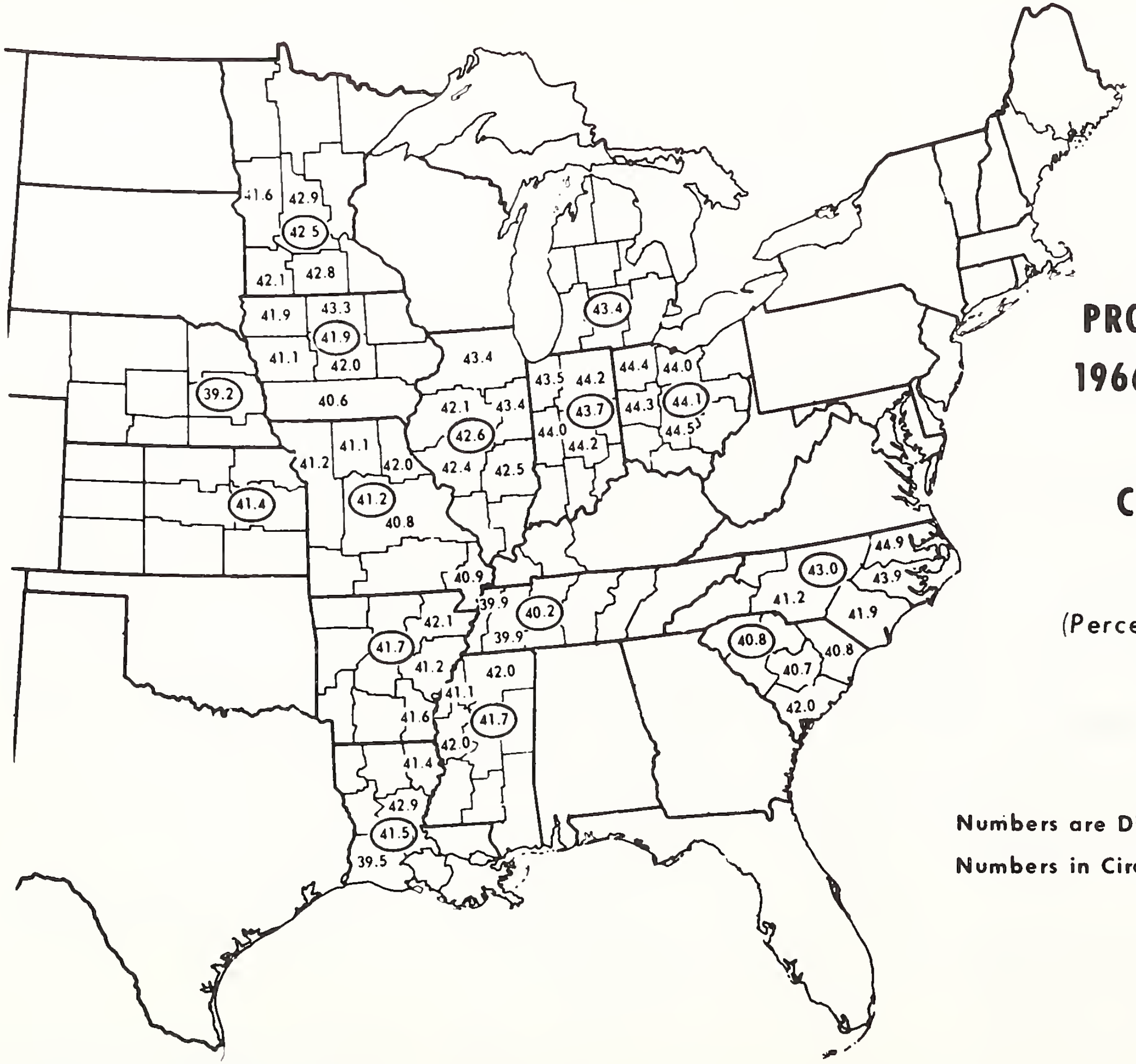
Numbers are District Averages

Numbers in Circles are State Averages

U S DEPARTMENT OF AGRICULTURE

NEG ERS 4865-66 (12) ECONOMIC RESEARCH SERVICE

Figure 1



PROTEIN CONTENT OF 1966-CROP SOYBEANS, BY USDA CROP-REPORTING DISTRICTS

(Percent - Dry Weight Basis)

Numbers are District Averages

Numbers in Circles are State Averages

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Figure 2

Analysis of the SRS 1966 soybean data indicates that oil content shows a general tendency to increase from north to south. Conversely, protein content tends to increase from south to north. This is generally evident within the individual States and between States.

Oil content of 1966-crop soybeans was lowest in Minnesota and Michigan and highest in Louisiana and South Carolina--an average difference of about 11 percent. However, protein content in the 2 northern States was about 3 percent higher than in the 2 southern States. In the major soybean producing areas of the Corn Belt, Illinois and Indiana soybeans were highest in oil content while the eastern and western sectors of the Belt were lower. Figure 1 shows the average oil content of 1966 soybeans by crop-reporting districts.

In the Delta region, the oil content of 1966-crop soybeans was lowest in Arkansas and Tennessee and highest in Mississippi and Louisiana. In the Atlantic Coast States, oil content showed a steady uptrend from 19.0 percent in the northern districts of North Carolina to 22.4 percent in the southern districts of South Carolina--representing an 18 percent increase.

Protein content of 1966-crop soybeans generally decreased as areas of production extended from north to south. Among the major producing States, protein content was highest in Ohio and lowest in South Carolina and Tennessee. In the Corn Belt States, protein content declined as production areas extended from east to west--from 44.1 percent in Ohio to 41.2 percent in Missouri. Figure 2 shows the average protein content of 1966 soybeans by crop-reporting districts.

While the percentage of oil content is highest in the Southern soybean areas, the North Central States average higher in both seed yield and oil yield per acre. Acreage planted to soybeans is influenced more by seed yield per acre than by the percentage of oil content or oil yield per acre.

* * * * * * * * * * * * * * * * * * *

Table 24.--Food fats and oils: Supply and disposition, 1961-66

Total 1/

Year beginning October	Production			Stocks		Domestic disappearance			Exports		
	Oct.-Nov.	Dec.-Sept.	Oct.-Sept.	Oct. 1	Dec. 1	Oct.-Nov.	Dec.-Sept.	Oct.-Sept.	Oct.-Nov.	Dec.-Sept.	Oct.-Sept.
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
1961	2,629	10,660	13,289	1,253	1,492	1,573	7,345	8,917	808	3,274	4,082
1962	2,751	11,102	13,853	1,488	1,656	1,702	7,189	8,891	872	3,479	4,351
1963	2,622	11,233	13,856	2,065	2,106	1,752	7,727	9,479	822	4,195	5,018
1964	2,863	11,256	14,119	1,361	1,349	1,724	7,840	9,565	1,142	3,898	5,040
1965	2,927	11,708	14,635	831	901	1,850	8,282	10,131	1,001	3,366	4,367
1966	2,849			925	1,035	1,778			955		
	Butter (actual weight), except farm 2/										
1961	220	1,332	1,552	238	224	233	1,123	1,356	2	17	19
1962	213	1,242	1,456	419	376	238	1,057	1,296	18	113	131
1963	184	1,241	1,425	450	318	257	1,113	1,370	59	260	319
1964	191	1,197	1,388	188	97	234	1,032	1,266	48	102	150
1965	156	953	1,108	161	83	230	951	1,181	4	20	24
1966	160			68	39	188			1		
	Lard, except farm										
1961	436	1,914	2,350	100	89	337	1,531	1,868	109	399	508
1962	448	1,941	2,389	73	93	344	1,465	1,810	84	438	571
1963	422	1,962	2,384	81	92	317	1,374	1,691	93	612	706
1964	429	1,701	2,130	68	104	269	1,436	1,705	124	307	431
1965	339	1,516	1,855	62	66	300	1,335	1,635	36	182	218
1966	357			64	76	298			46		
	Beef fats 3/										
1961	77	367	444	25	21	80	359	438	2	9	10
1962	71	409	480	21	24	66	391	457	2	8	9
1963	107	471	578	34	29	111	467	578	1	9	10
1964	96	439	535	25	29	90	437	527	1	10	11
1965	98	466	563	22	26	89	441	530	4	12	16
1966	106			40	43	99			4		
	Total edible vegetable oils 4/ 5/										
1961	1,896	7,047	8,943	890	1,158	935	4,397	5,332	683	2,785	3,468
1962	2,019	7,510	9,529	975	1,163	1,067	4,355	5,422	755	2,791	3,546
1963	1,909	7,559	9,469	1,500	1,667	1,081	4,870	5,951	654	3,218	3,872
1964	2,148	7,919	10,067	1,080	1,120	1,152	4,992	6,144	948	3,421	4,369
1965	2,334	8,773	11,108	587	726	1,244	5,605	6,849	945	3,101	4,046
1966	2,226			753	876	1,210			886		

Continued -

Table 24.--Food fats and oils: Supply and disposition, 1961-66

Year beginning October	Production			Stocks		Domestic disappearance			Exports		
	Oct.-Nov.	Dec.-Sept.	Oct.-Sept.	Oct. 1	Dec. 1	Oct.-Nov.	Dec.-Sept.	Oct.-Sept.	Oct.-Nov.	Dec.-Sept.	Oct.-Sept.
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
					Cottonseed oil 5/						
1961	512	1,440	1,952	170	320	280	1,072	1,352	82	393	474
1962	505	1,424	1,930	296	461	281	1,065	1,347	59	332	392
1963	496	1,433	1,939	488	637	290	1,118	1,407	56	530	586
1964	471	1,530	2,001	433	535	289	1,266	1,555	80	563	643
1965	449	1,384	1,833	236	281	347	1,249	1,595	57	215	272
1966	349			202	310	229			13		
					Soybean oil 5/						
1961	1,302	5,172	6,475	677	802	576	2,964	3,540	601	2,392	2,993
1962	1,429	5,646	7,075	618	640	712	2,913	3,624	696	2,453	3,149
1963	1,320	5,605	6,925	920	935	711	3,347	4,058	593	2,615	3,209
1964	1,576	5,835	7,411	578	533	767	3,302	4,069	854	2,768	3,622
1965	1,773	6,791	8,564	297	401	800	3,888	4,688	869	2,842	3,711
1966	1,773			462	485	878			872		
					Corn oil						
1961	60	326	386	33	28	65	305	370	---	---	---
1962	66	328	395	50	51	65	316	381	---	---	---
1963	72	343	415	63	67	68	349	416	---	---	---
1964	70	366	435	62	43	88	374	462	---	---	---
1965	77	383	459	35	29	83	356	439	---	---	---
1966	76			55	54	77			---		
					Peanut oil 5/						
1961	12	60	73	9	7	14	56	70	6/	1	1
1962	9	85	94	11	11	9	61	69	6/	6	6
1963	15	109	123	30	27	13	56	69	4	72	76
1964	23	150	173	8	9	8	51	59	14	90	104
1965	30	175	205	18	16	14	113	126	18	45	63
1966	19			34	27	25			6/		

1/ Includes butter, except farm; lard, except farm; beef fats; and edible vegetable oils. Production and exports include the oil equivalent of exported oilseeds. Domestic disappearance and exports have been adjusted for exports of processed food oils not classified by kind, shortening, margarine, and other secondary fats. Exports also include shipments and quantities from CCC stocks that were not reported in Census data. During 1960-64 exports include estimates of foreign donations of fats and oils. 2/ 1962-64, stocks include estimates of butter oil, ghee, and canned butter. 3/ Includes edible tallow, oleo stock, oleo oil and oleo stearine. 4/ Includes cottonseed, soybean, corn, peanut, and edible olive oils. Production includes imports of corn, peanut, and edible olive oils. 5/ Production and exports include oil equivalent of oilseed exported for crushing. 6/ Less than 500,000 pounds.

Totals computed from unrounded numbers.

Table 25.--Fats, oils, including their products: Production from domestic and imported materials, and factory and warehouse stocks at end of month

Item	Production 1/						Stocks			
	October-November		1965	1966			1965	1966		
	1965	1966	Nov.	Sept.	Oct.	Nov.	Nov. 30	Sept. 30	Oct. 31	Nov. 30
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
PRIMARY FATS AND OILS										
Food fats and oils										
Butter 2/	155.6	159.9	77.8	70.5	79.1	80.8	83.0	68.4	58.1	39.0
Lard and rendered pork fat 3/	339.0	357.0	176.0	166.0	175.0	182.0	65.5	64.0	70.3	76.5
Beef fats	97.7	106.1	51.3	46.4	49.5	56.6	26.0	40.3	43.3	43.1
Total edible animal fats	592.3	623.0	305.1	282.9	303.6	319.4	174.5	172.7	171.7	158.6
Corn oil	76.6	75.6	36.5	35.9	39.5	36.1	28.6	55.4	54.6	54.5
Cottonseed oil	448.6	348.7	236.5	67.7	165.6	183.1	281.1	201.8	246.2	310.0
Peanut oil	15.2	18.3	7.8	8.1	9.2	9.1	15.5	33.5	29.5	26.6
Soybean oil	984.9	1,004.0	510.1	382.1	482.1	521.9	401.1	462.0	457.7	484.8
Total edible vegetable oils	1,525.3	1,446.6	790.9	493.8	696.4	750.2	726.3	752.7	788.0	875.9
Soap fats and oils										
Tallow, inedible, and greases excluding wool grease 4/	726.9	780.9	359.6	374.0	370.7	410.2	391.5	417.1	422.8	427.9
Palm oil 5/	---	---	---	---	---	---	10.6	17.3	19.1	27.4
Fish and marine oil 5/	17.7	25.2	8.2	20.4	8.7	16.5	201.4	180.4	172.1	180.0
Coconut oil	66.9	---	38.2	33.2	---	---	127.0	189.0	187.4	185.5
Total soap fats	811.5	806.1	406.0	427.6	379.4	426.7	730.5	803.8	801.4	820.8
Drying Oils										
Castor oil 5/	---	---	---	---	---	---	203.8	190.6	188.5	185.4
Linseed oil	79.4	84.4	33.5	44.1	45.4	39.0	199.9	188.6	207.8	217.9
Safflower seed oil	12.6	13.5	---	31.2	13.5	---	36.0	49.5	56.2	51.2
Tall oil	195.9	202.7	98.2	97.7	101.0	101.7	300.7	257.5	250.4	253.3
Tung oil	.8	---	.8	---	---	---	49.6	54.4	53.0	55.9
Total drying oils	288.7	300.6	132.5	173.0	159.9	140.7	790.0	740.6	755.9	763.7
Grand total 6/ 7/	3,217.8	3,176.3	1,634.6	1,377.4	1,539.3	1,637.0	2,421.3	2,469.8	2,517.0	2,619.0
From domestic materials	3,150.9	3,176.3	1,596.4	1,344.2	1,539.3	1,637.0				
From imported materials	66.9	---	38.2	33.2	---	---				
FAT-AND-OIL PRODUCTS										
Cooking and salad oils										
Total	444.8	457.7	231.3	219.3	219.9	237.8	80.3	60.6	67.6	83.0
Soybean	241.3	290.1	132.5	130.9	139.4	150.7	47.8	34.6	35.8	47.3
Other	203.5	167.6	98.8	88.4	80.5	87.1	32.5	26.0	31.8	35.7
Baking and frying fats (shortening)										
Total	537.9	535.3	270.4	276.8	260.5	274.8	113.1	116.8	118.5	109.7
100% vegetable oil	373.9	331.3	185.5	179.0	168.2	163.1	81.9	91.4	92.2	83.1
100% animal fats or blends of vegetable oil and animal fats	164.0	204.0	84.9	97.8	92.3	111.7	31.2	25.4	26.3	26.6
Margarine										
Total	330.3	383.6	168.7	173.4	190.0	193.6	45.3	57.5	59.9	54.8
1 pound units	298.0	331.7	152.5	148.2	164.0	167.7	---	---	---	---
All other	32.3	53.2	16.2	25.2	26.4	26.8	---	---	---	---
Fatty Acids	185.6	184.7	99.2	100.0	93.9	90.8	89.8	91.3	93.9	89.4

1/ Factory production except as otherwise noted.

2/ Creamery butter and cold-storage stocks, United States Department of Agriculture.

3/ Total commercial. Excludes farm production. Federally inspected in October-November 1965 totaled 304.2 million pounds, October-November 1966 totaled 319.7 million pounds.

4/ Total apparent production.

5/ Stocks include GSA stockpile.

6/ Computed from unrounded numbers.

7/ Excludes estimated output of farm butter and farm lard, 25 million pounds in October-November 1965; 12 million pounds in October-November 1966.

Table 26.--Imports and exports of fats, oils, oil-bearing materials and fat-and-oil products in terms of oil

Item	Imports for consumption					Exports 1/				
	Oct. Nov.		1966			Oct.-Nov.		1966		
	1965	1966	Sept.	Oct.	Nov.	1965	1966	Sept.	Oct.	Nov.
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
Food fats and oils										
Butter	.1	.1	2/	2/	.1	2.2	1.0	.5	.4	.6
Lard	---	---	---	---	---	26.0	34.3	8.1	15.0	19.4
Beef fats	2/	---	---	---	---	4.0	4.1	1.5	1.9	2.2
Total, edible animal fats	.1	.1	2/	2/	.1	32.2	39.4	10.1	17.3	22.2
Corn oil	---	.9	2.0	.9	---	---	---	---	---	---
Cottonseed oil	---	1.0	---	1.0	---	56.6	12.2	3.8	6.4	5.8
Cottonseed (17 percent)	---	---	---	---	---	.1	2/	2/	2/	2/
Olive oil, edible	6.1	8.2	3.5	4.4	3.9	---	---	---	---	---
Peanut oil	2/	---	2/	---	---	3.5	.4	2/	2/	.4
Peanuts, shelled (43.5 percent)	---	---	---	---	---	14.8	1.1	1.0	.3	.8
Soybean oil	---	---	---	---	---	78.2	99.0	88.5	33.5	65.5
Soybeans (18.3 percent)	---	2/	2/	---	2/	788.2	768.9	60.7	321.9	447.1
Other vegetable oils	1.8	1.5	1.0	.8	.7	1.1	1.4	.6	.6	.9
Total, edible vegetable oils	7.9	11.6	6.5	7.1	4.6	942.5	883.0	154.6	362.7	520.5
Soap fats and oils										
Tallow, inedible	.1	.2	.2	.1	.1	285.6	329.0	127.7	147.2	181.8
Greases	2/	2/	---	2/	2/	26.5	27.1	7.8	6.8	20.3
Fish and fish liver oils non-medicinal	.4	7.1	.4	7.0	.1	3/12.4	4.6	.4	4.3	.3
Marine mammal oils	13.3	5.4	.2	4.5	.9	---	---	---	---	---
Olive oil, inedible	.1	.2	2/	.2	---	---	---	---	---	---
Palm oil	2.8	28.8	2.8	9.0	19.7	---	---	---	---	---
Total, slow-lathering oils	16.7	41.7	3.6	20.8	20.8	324.5	360.7	135.9	158.3	202.4
Coconut oil	53.2	55.4	39.3	24.2	31.3	.8	1.5	.8	1.2	.3
Copra (64 percent)	62.1	39.1	43.6	15.2	23.9	---	---	---	---	---
Palm kernel oil	10.5	19.9	7.6	10.1	9.7	---	---	---	---	---
Total, lauric-acid oils	125.8	114.4	90.5	49.5	64.9	.8	1.5	.8	1.2	.3
Drying oils										
Flaxseed (35.7 percent)	---	---	---	---	---	35.8	25.9	26.8	15.8	10.1
Linseed oil	2/	2/	---	2/	2/	9.5	13.8	1.1	7.5	6.2
Oiticica oil	.2	---	1.1	---	---	---	---	---	---	---
Tall oil	---	---	---	---	---	15.3	13.1	7.9	9.3	3.8
Tung oil	3.3	5.9	2.8	2.5	3.5	.2	.2	.1	.2	2/
Safflower seed (36 percent)	---	---	---	---	---	26.3	13.2	27.4	5.8	7.3
Total	3.5	5.9	3.9	2.5	3.5	87.1	66.2	63.3	38.6	27.4
Other industrial oils and fats										
Cashew nut shell liquid (oil)	---	---	---	---	---	---	---	---	---	---
Castor oil	29.2	20.3	9.9	5.8	14.5	---	---	---	---	---
Castor beans (46.5 percent)	---	2/	---	---	2/	---	---	---	---	---
Fish-liver oils, medicinal	2.0	1.9	.9	1.0	.9	---	---	---	---	---
Rapeseed oil	1.7	1.8	.4	1.1	.7	---	---	---	---	---
Wool grease	1.0	1.1	.6	.5	.6	---	---	---	---	---
Other vegetable oils and fats, inedible	2.2	.8	2/	.7	2/	7.3	6.1	4.4	4.0	2.1
Total	36.1	25.9	11.8	9.1	16.7	7.3	6.1	4.4	4.0	2.1
Other products										
Margarine (fat content)	---	---	---	---	---	.4	.5	.6	.2	.2
Shortening	---	---	---	---	---	9.2	10.0	1.5	7.8	2.2
Cooking and salad oils	---	---	---	---	---	---	---	---	---	---
Salad products (fat content)	---	---	---	---	---	.9	.9	.6	.3	.6
Soap (fat content)	.7	.5	.3	.3	.2	2.8	2.3	1.0	.9	1.4
Fatty acids	.6	2.4	.9	1.5	.9	5.4	4.1	3.0	1.6	2.5
Total	1.3	2.9	1.2	1.8	1.1	18.7	17.8	6.7	10.8	6.9
Grand total 4/	191.3	202.4	117.5	90.7	111.7	1,413.0	1,374.9	375.7	593.1	781.8

1/ Includes re-exports but not shipments. Shipments average about 90 million pounds per year of which approximately 60 million are lard. Beginning January 1965, includes foreign donations.

2/ Less than 50,000 pounds.

3/ Beginning January 1965, includes marine mammal oils and fish liver oils.

4/ Computed from unrounded numbers.

Table 27.--Index numbers of wholesale prices of fats and oils, by years, 1961-66

Item	1961	1962	1963	1964	1965	1966
	1957-59=100					
All fats and oils	99	90	89	96	107	110
All fats and oils, except butter	95	83	82	92	108	105
Grouped by origin:						
Animal fats	98	92	91	99	109	111
Vegetable oils, domestic	105	87	83	86	101	108
Vegetable oils, foreign	87	87	92	95	109	91
Grouped by use:						
Butter	101	100	99	100	102	114
Butter, seasonally adjusted	101	100	99	100	103	114
Lard	91	82	79	92	111	106
Food fats other than butter	98	84	81	88	105	107
Food fats other than butter and lard	101	85	82	85	102	108
All edible fats and oils	101	93	91	95	105	113
Soap fats	84	74	78	97	113	102
Drying oils	107	105	100	94	99	97
Other industrial	88	74	77	88	102	94
All industrial	91	82	84	98	113	103
Edible vegetable oils, grouped by degree of processing:						
Crude	103	85	82	84	101	107
Refined	108	93	84	82	97	109
End products	103	97	88	90	101	105
Margarine, Colored	102	97	93	94	102	104

All indexes except "Butter, seasonally adjusted" and "Other industrial" from Bureau of Labor Statistics.

Table 28.--Prices received by farmers and prices at terminal markets for specified oil-bearing materials and oilmeals, by years, 1961-66

Item	Unit	1961	1962	1963	1964	1965	1966
		Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
Copra, Philippines, c.i.f. Pacific Coast	Short ton	156.60	151.72	170.16	179.47	203.00	168.79
Cottonseed, United States average	Short ton	48.40	48.90	49.90	47.40	47.10	58.60
Flaxseed, No. 1, Minneapolis	Bushel	3.34	3.30	3.03	3.10	3.10	3.15
Flaxseed, United States average	Bushel	2.99	3.02	2.76	2.81	2.82	2.85
Peanuts, No. 1, shelled, Spanish, Southeastern shipping points 1/	100 lb.	18.12	18.38	19.00	20.44	20.19	19.27
Peanuts, United States average	100 lb.	10.80	11.20	11.20	11.30	11.50	11.40
Soybeans, No. 1, Yellow, Chicago	Bushel	2.69	2.51	2.68	2.68	2.82	3.13
Soybeans, No. 1, Yellow, Illinois country shipping points	Bushel	2.62	2.42	2.60	2.60	2.75	3.07
Soybeans, United States average	Bushel	2.50	2.32	2.50	2.50	2.62	2.92
		Oilseed Meals (Bulk)					
Copra meal, 20 percent protein, Los Angeles	Short ton	64.30	77.80	80.75	73.95	80.50	84.65
Cottonseed meal, 41 percent protein, Memphis	Short ton	57.55	61.10	67.70	60.25	60.10	76.70
Cottonseed meal, 41 percent protein, Chicago	Short ton	66.80	69.45	76.85	67.95	68.70	84.95
Cottonseed meal, 41 percent protein, Atlanta	Short ton	63.05	66.50	72.45	64.35	64.90	81.75
Linseed meal, 34 percent protein, Minneapolis	Short ton	55.80	69.40	65.80	56.50	64.10	77.10
Linseed meal, 34 percent protein, New York	Short ton	73.50	87.40	83.95	74.15	80.75	93.55
Peanut meal, 45 percent protein, f.o.b. Southeastern mills	Short ton	59.25	63.70	67.70	2/61.65	2/70.10	2/83.20
Safflower meal, 20 percent solvent, San Francisco	Short ton	29.70	30.50	35.90	29.80	30.75	35.25
Soybean meal, 44 percent protein, Chicago	Short ton	66.90	70.40	76.55	73.35	75.85	88.15
Soybean meal, 44 percent protein, Decatur	Short ton	63.15	66.50	72.50	69.15	71.45	83.80
Soybean meal, 44 percent protein, Atlanta	Short ton	70.80	74.80	80.70	77.30	79.65	91.00
Soybean meal, 44 percent protein, Memphis	Short ton	64.40	68.60	74.00	72.15	74.10	86.10

1/ This price applies to peanuts for edible uses. 2/ Beginning October 1964, quoted as 50 percent protein.

Compiled from Oil, Paint, and Drug Reporter, Daily Market Record (Minneapolis), Wall Street Journal, Chicago edition, reports of the Statistical Reporting Service and the Agricultural Marketing Service.

Table 29.--Wholesale and retail prices per pound for fats and oils, by years, 1961-66

Item	1961	1962	1963	1964	1965	1966
	Cents	Cents	Cents	Cents	Cents	Cents
Wholesale Prices:						
Butter, creamery, Grade A, (92-score) bulk, New York	61.2	59.5	59.1	59.9	61.2	67.3
Butter, creamery, Grade A, (92-score) bulk, Chicago	60.5	58.6	58.2	59.1	60.2	66.6
Butter, creamery, Grade A, (92-score) prints, San Francisco	71.3	69.7	69.2	71.5	72.0	79.8
Castor oil, dehydrated, tanks, New York	25.0	25.1	25.1	25.1	24.6	25.0
Castor oil, No. 1, Brazilian, tanks, imported, New York	19.3	19.0	18.8	15.9	13.2	15.0
Castor oil, No. 1, tanks, f.o.b., New Jersey mills	20.8	20.0	20.0	17.4	15.4	16.4
Coconut oil, crude, tank cars, Pacific Coast, f.o.b. mills 1/	11.5	10.8	11.8	13.4	15.9	13.2
Coconut oil, crude, tanks, f.o.b. New York 1/	12.7	11.8	12.6	13.8	15.9	13.3
Coconut oil, refined, drums, l.c.l., New York 1/	18.7	16.6	16.2	17.3	22.0	20.3
Cod oil, spot, drums, New York	8.2	8.1	8.4	10.0	12.6	11.0
Codliver oil, medicinal, U. S. P., barrels, New York	18.2	17.9	17.2	18.2	19.0	19.5
Corn oil, crude, tank cars, f.o.b. Midwest mills	18.3	14.6	12.1	11.1	14.0	16.1
Corn oil, refined, tanks, New York	22.1	18.2	15.3	13.7	16.8	19.2
Cottonseed oil, crude, tank cars, f.o.b., S. E. mills	13.0	11.5	10.4	10.3	11.7	14.3
Cottonseed oil, crude, tank cars, f.o.b., Valley	12.9	11.4	10.2	10.3	11.6	14.1
Cottonseed oil, crude, tank cars, f.o.b., Texas	12.8	11.2	10.1	10.3	11.6	14.1
Cottonseed oil, p.s.y., bleachable, tank cars, New York 2/	14.7	13.3	12.4	11.7	13.1	15.9
Cottonseed oil, refined, tanks, New York	16.4	14.6	13.1	13.0	14.2	16.9
Degras, Lanolin technical, drums, New York	13.0	20.9	21.1	33.4	39.8	28.5
Glycerin, soaplye, tanks, New York 3/	13.2	10.7	10.5	13.8	12.7	14.4
Grease, A white, tank cars, delivered Chicago	6.1	5.2	5.4	6.6	7.8	7.8
Grease, B white, delivered, Chicago	5.6	4.8	4.9	6.1	7.5	6.8
Grease, yellow, delivered, Chicago	5.4	4.5	4.7	5.9	7.2	6.5
Grease, white, choice, tanks, New York	8.2	6.2	6.9	7.7	8.8	8.3
Grease oil, extra No. 1, drums, Chicago	12.0	12.0	12.0	12.5	13.5	13.5
Lard, loose, tank cars, Chicago	9.6	8.7	8.3	9.7	11.7	11.2
Lard, prime steam, tierces, Chicago	10.2	8.8	8.7	9.7	11.7	11.2
Lard, refined, 1-pound cartons, Chicago 4/	15.1	14.7	14.0	15.0	17.6	17.1
Linseed oil, raw, tank cars, Minneapolis	14.2	14.2	12.7	13.4	13.4	12.8
Linseed oil, raw, tanks, New York	15.3	15.3	13.8	14.5	14.5	13.8
Margarine, colored, delivered, Eastern U. S.	26.8	25.6	23.8	24.1	26.1	26.6
Margarine, yellow, quarters, f.o.b., Chicago	27.5	25.7	25.0	25.4	26.2	26.2
Margarine, white, domestic vegetable, Chicago	25.5	24.3	23.2	23.4	24.2	23.2
Menhaden oil, crude, tanks, f.o.b., Baltimore	6.2	4.6	6.2	8.7	9.2	9.4
Menhaden oil, light pressed, tanks, New York	10.6	10.1	9.2	10.7	11.3	11.3
Neat's foot oil, 30°, drums, carlots, New York	27.0	27.0	27.0	27.0	27.0	27.0
Oiticica oil, drums, f.o.b., New York	15.6	18.9	30.4	21.9	23.8	21.4
Oiticica oil, tanks, New York	14.1	16.9	28.4	20.0	21.6	19.2
Oleo oil, extra, drums, Chicago	16.5	16.6	16.9	17.9	18.2	19.1
Olive oil, imported, edible, drums, New York	31.3	35.5	50.9	32.4	36.8	36.8
Palm oil, clarified, drums, f.o.b. New York 5/	14.6	13.9	14.0	14.2	15.8	15.1
Palm oil, Congo, tank cars, f.o.b., New York	11.8	11.6	11.6	11.8	13.4	12.7
Palm kernel oil, bulk, c.i.f., New York 5/	11.2	10.9	12.5	13.3	15.4	12.9
Peanut oil, crude, tank cars, f.o.b. S. E. mills	16.1	16.4	11.6	12.9	13.5	13.7
Peanut oil, refined, tanks, New York	19.2	19.3	14.5	15.6	16.2	16.4
Rapeseed oil, refined (denatured), tanks, New York	16.4	14.4	13.3	14.1	15.4	15.4
Safflower oil, nonbreak, tanks, East Coast	17.2	18.9	14.8	12.8	15.3	16.2
Sesame oil, refined, drums, New York	37.0	37.0	35.8	33.0	33.0	34.8
Shortening, all vegetable, hydrogenated, 440-lb. drums, New York	21.5	20.4	20.3	21.5	23.3	21.8
Shortening, all vegetable, hydrogenated, 3 lb. tins, delivered, Eastern U.S.	27.7	25.0	22.3	22.5	26.4	27.2
Soybean oil, crude, tank cars, f.o.b., Decatur	11.5	9.0	8.9	9.2	11.2	11.7
Soybean oil, refined, tanks, New York	13.7	11.2	11.1	11.4	13.4	13.5
Soybean oil, clarified, tanks, New York	13.3	10.9	10.8	11.0	13.2	13.7
Sperm oil, natural, 45°, drums, New York	16.1	17.1	17.5	16.8	14.9	14.5
Sperm oil, bleached, winter 45°, drums, New York	17.1	18.1	18.5	17.8	15.9	15.5
Tall oil, crude, tanks, works	3.2	3.5	3.6	3.6	3.5	3.2
Tall oil, refined, tanks, works	7.1	7.5	7.5	7.5	7.5	7.5
Tallow, edible, loose, Chicago	9.2	8.8	8.0	9.5	11.6	11.3
Tallow, inedible, packers' prime, c.a.f. delivered, Chicago	5.9	5.1	5.2	6.4	7.8	7.0
Tallow, inedible, bleachable fancy, delivered, Chicago	6.3	5.5	5.6	7.0	8.2	7.5
Tallow, No. 1, inedible, delivered, Chicago	5.4	4.5	4.7	5.9	7.2	6.5
Tallow, special, inedible, tanks, delivered, New York	6.2	5.3	5.5	6.7	8.0	7.1
Tung oil, imported, drums, f.o.b., New York	29.4	39.4	39.3	27.0	27.8	23.3
Tung oil, tanks, New York	27.7	37.4	37.4	25.0	25.8	21.0
Tung oil, domestic, tanks, f.o.b. mills	27.6	36.9	36.9	25.5	25.9	24.0
Retail prices 6/						
Butter	76.3	75.2	75.0	74.4	75.4	82.2
Margarine	28.6	28.4	27.5	26.0	27.9	28.7
Shortening	30.0	29.6	27.8	26.3	29.3	30.0
Salad Dressing 7/	37.4	38.3	38.1	74.1	74.4	75.4
Peanut Butter	55.8	57.4	57.7	58.4	59.9	60.0
Cooking and Salad oils	---	---	---	32.0	34.9	38.6

1/ 3-cent processing tax suspended beginning October 1957.
2/ Nearby futures.
3/ Beginning January 1965, average of weekly prices, New York Journal of Commerce.
4/ Beginning April 1966, one and two pound prints.
5/ 3-cent processing tax suspended beginning July 1959.
6/ Leading cities.
7/ Salad dressing (Italian), beginning January 1964.

Table 30.--Index numbers of wholesale prices of fats and oils

Item	1957-59=100				
	December		1966		
	1964	1965	October	November	December
All fats and oils	107	109	108	104	103
All fats and oils, except butter	110	107	98	96	95
Grouped by origin:					
Animal fats	108	112	111	107	105
Vegetable oils, domestic	107	100	101	100	99
Vegetable oils, foreign	101	101	88	88	90
Grouped by use:					
Butter	98	109	119	114	113
Butter, seasonally adjusted	90	100	114	105	103
Lard	104	112	102	97	89
Food fats other than butter	106	105	101	99	95
Food fats other than butter and lard	106	102	100	100	98
All edible fats and oils	104	108	111	108	105
Soap fats	117	110	93	90	94
Drying oils	103	97	93	93	92
Other industrial	103	98	88	84	87
All industrial	117	110	95	93	96
Edible vegetable oils, grouped by degree of processing:					
Crude	106	100	100	99	98
Refined	98	109	97	102	101
End products	100	98	108	107	107
Margarine, Colored	101	102	107	107	107

All indexes except "Butter, seasonally adjusted" and "Other industrial" from Bureau of Labor Statistics.

Table 31.--Prices received by farmers and prices at terminal markets for specified oil-bearing materials and oilmeals

Item	Unit	December		1966		
		1964	1965	October	November	December
		Dollars	Dollars	Dollars	Dollars	Dollars
Copra, Philippines, c.i.f. Pacific Coast	Short ton	186.25	189.10	160.12	154.62	158.60
Cottonseed, United States average	Short ton	48.60	47.80	65.90	65.60	65.90
Flaxseed, No. 1, Minneapolis	Bushel	3.20	2.99	3.20	3.19	3.16
Flaxseed, United States average	Bushel	2.90	2.71	2.90	2.90	2.88
Peanuts, No. 1, shelled, Spanish, Southeastern shipping points 1/	100 lb.	19.75	19.25	19.12	19.12	19.12
Peanuts, United States average	100 lb.	11.40	11.30	11.20	11.20	11.30
Soybeans, No. 1, Yellow, Chicago	Bushel	2.91	2.66	2.96	2.99	3.00
Soybeans, No. 1, Yellow, Illinois country shipping points	Bushel	2.83	2.62	2.88	3.04	2.95
Soybeans, United States average	Bushel	2.71	2.48	2.78	2.80	2.82
		Oilseed Meals (Bulk)				
Copra meal, 20 percent protein, Los Angeles	Short ton	70.20	82.50	82.00	82.00	82.00
Cottonseed meal, 41 percent protein, Memphis	Short ton	61.20	66.60	75.10	80.90	83.20
Cottonseed meal, 41 percent protein, Chicago	Short ton	68.40	73.80	83.20	88.50	92.30
Cottonseed meal, 41 percent protein, Atlanta	Short ton	64.20	70.50	84.20	86.50	88.50
Linseed meal, 34 percent protein, Minneapolis	Short ton	59.00	69.90	81.70	78.20	77.70
Linseed meal, 34 percent protein, New York	Short ton	76.40	86.90	99.40	98.40	101.25
Peanut meal, 45 percent protein, f.o.b. Southeastern mills 2/	Short ton	66.60	78.50	88.10	91.40	93.40
Safflower meal, 20 percent solvent, San Francisco	Short ton	28.90	30.80	35.10	35.50	34.90
Soybean meal, 44 percent protein, Chicago	Short ton	72.10	75.70	86.60	83.40	89.10
Soybean meal, 44 percent protein, Decatur	Short ton	67.80	71.40	82.20	78.90	84.60
Soybean meal, 44 percent protein, Atlanta	Short ton	74.80	79.40	90.40	87.10	91.20
Soybean meal, 44 percent protein, Memphis	Short ton	70.30	74.20	86.90	82.00	87.60

1/ This price applies to peanuts for edible uses. 2/ Beginning October 1964, 50 percent protein.

Compiled from Oil, Paint, and Drug Reporter, Daily Market Record (Minneapolis), Wall Street Journal, Chicago edition, reports of the Statistical Reporting Service and the Agricultural Marketing Service.

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